HCD-CP2

SERVICE MANUAL

AEP Model
UK Model
E Model

HCD-CP2 is the Amplifier, CD player, Tape Deck and Tuner section in CMT-CP2.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ᗡᗡ are trademarks of Dolby Laboratories Licensing Corporation.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	KSL-2130CCP/K1N
	Optical Pick-up Name	KSS-213C/K1N
Tape deck Section	Model Name Using Similar Mechanism	HCD-W550
	Tape Transport Mechanism Type	TCM-220WR2E

SPECIFICATIONS

Amplifier section

European model:

DIN power output (rated): 30 + 30 W
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
35 + 35 W
(6 ohms at 1 kHz, 10% THD)

Music power output (reference):
130 W

Other models:

The following measured at 230 V AC, 60 Hz

DIN power output (rated): 30 + 30 W
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
35 + 35 W
(6 ohms at 1 kHz, 10% THD)

The following measured at 220 V AC, 60 Hz

DIN power output (rated): 28 + 28 W
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
33 + 33 W
(6 ohms at 1 kHz, 10% THD)

Inputs

MD IN (phono jacks): Sensitivity 500 mV, impedance 47 kilohms

VIDEO IN (phono jacks): Sensitivity 250 mV, impedance 47 kilohms

Outputs

LINE OUT (phono jacks): Sensitivity 250 mV, impedance 1 kilohm

OPTICAL DIGITAL OUT CD:
Optical

PHONES (stereo phone jack):
Accepts headphones with an impedance of 8 ohms or more

SPEAKER: Active speaker system, 6 ohms

CD player section

System: Compact disc and digital audio system

Laser: Semiconductor laser
(λ = 780 nm)
Emission duration: continuous

Laser output: MAX 44.6 μW*
* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.

Wavelength: 780 - 790 nm

Frequency response: 20 Hz - 20 kHz (±0.5 dB)

Tape player section

Recording system: 4-track 2-channel stereo

Frequency response (DOLBY NR OFF)
50 - 13,000 Hz (±3 dB), using a Sony TYPE I cassette
50 - 14,000 Hz (±3 dB), using a Sony TYPE II cassette

– Continued on next page –

MICRO HiFi COMPONENT SYSTEM

MICROFILM

SONY®

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 - 108.0 MHz (50-kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
European model:	531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Other models:	530 - 1,710 kHz (with the tuning interval set at 10 kHz) 531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Antenna	AM loop antenna, external antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
European model:	230 V AC, 50/60 Hz
Other models:	110 - 120 V or 220 - 240 V AC , 50/60 Hz Adjustable with voltage selector
Power consumption	70 W
Dimensions (w/h/d)	Approx. 225 × 273 × 337 mm (8 7/8 × 10 3/4 × 13 3/8 in) incl. projecting parts and controls
Mass	Approx. 6.7 kg (14 lb 12 oz)
Supplied accessories	Remote commander (1) AM loop antenna (1) FM wire antenna (1) Batteries (2)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

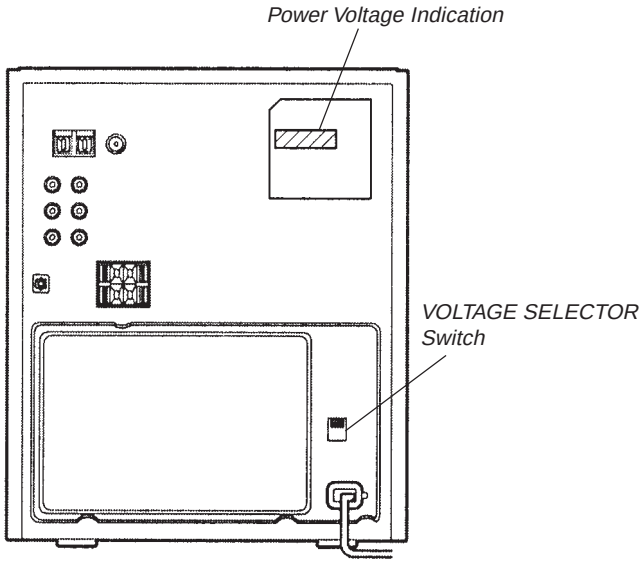
CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

The following caution label is located inside the unit.

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSAETTELSE FOR STRÅLING.
VORSICHT : UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET UND SICHEREITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING : OSYNLING LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVERSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VIGYAZAT! : A BURKOLAT NYITÁSAKOR LÁTHATATLAN LÉZERSUGÁRVESZÉLY! KERÜLJE A BESUGÁRZÁST!

• MODEL IDENTIFICATION
– Rear Panel –

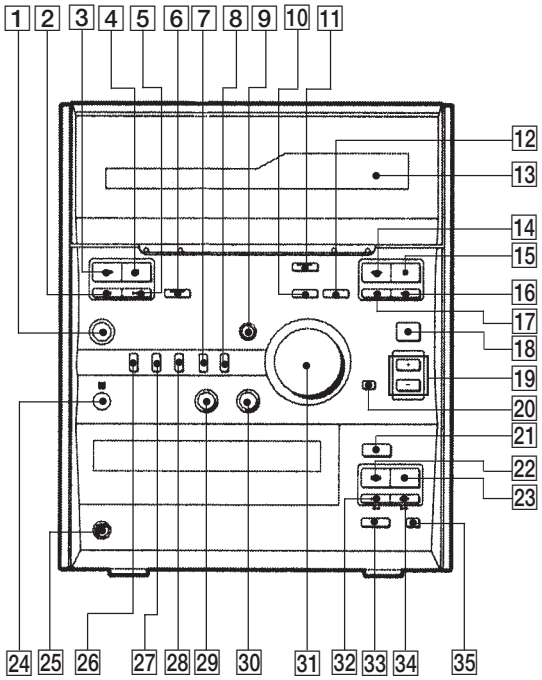


Model	Power Voltage Indication
AEP, UK and North European models	AC: 230 V ∿50 Hz 70 W
Saudi Arabia, Singapore models	AC: 110 – 120/ 220 – 240 V ∿50/60 Hz 70 W

SECTION 2
GENERAL

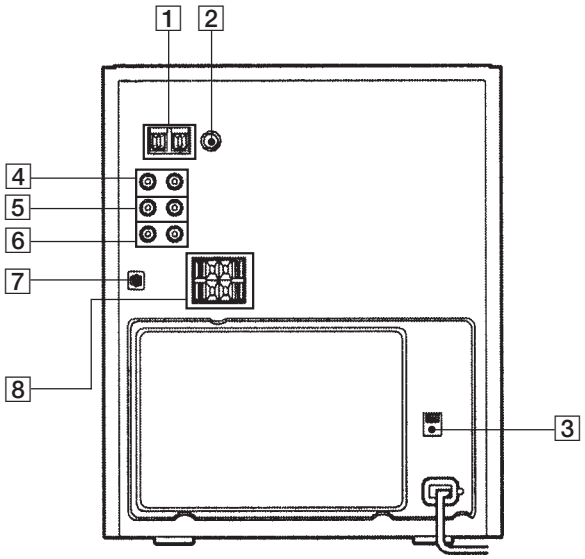
• LOCATION OF CONTROLS

– Front View –



1 STANDBY I/⏻ button and indicator
2 TAPE A ◀◀ button
3 TAPE A ◀▶ button
4 TAPE A ■ button
5 TAPE A ▶▶ button
6 HI-SPEED DUBBING button and indicator
7 CD button and indicator
8 TUNER button and indicator
9 DSG button and indicator
10 ❚❚ button
11 CD SYNC button and indicator
12 REC ● button
13 Liquid crystal display
14 TAPE B ◀▶ button
15 TAPE B ■ button
16 TAPE B ▶▶ button
17 TAPE B ◀◀ button
18 TUNER BAND button
19 TUNING +/– buttons
20 TUNING MODE button
21 EJECT ⏏ button
22 CD ▶❚❚ button
23 CD ■ button
24 Remote sensor
25 PHONES jack
26 VIDEO button and indicator
27 MD button and indicator
28 TAPE button and indicator
29 BASS switch
30 TREBLE switch
31 VOLUME knob
32 CD ⏮ ◀◀ button
33 PLAY MODE button
34 CD ▶▶⏭ ▶▶ button
35 REPEAT button

– Rear View –



1 AM ANTENNA terminals
2 FM ANTENNA jack or terminals
3 VOLTAGE SELECTOR switch
(Saudi Arabia, singapore models)
4 LINE OUT jacks
5 MD IN jacks
6 VIDEO IN jacks
7 DIGITAL OUT OPTICAL (CD) connector
8 SPEAKER terminals

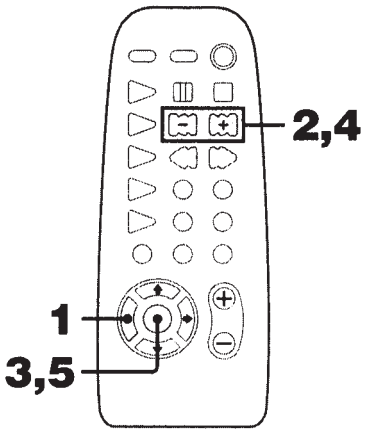
This section is extracted from instruction manual.

Step 2: Setting the time

Before you can use the system's timer functions, set the internal clock.

The clock uses a 24-hour system on the European model, and a 12-hour system on other models.

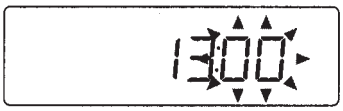
The 24-hour system is used here for illustration purposes.



1 Press TIMER SET.
The hour indication flashes.

2 Press ⏮/⏭ repeatedly to set the hour.

3 Press ENTER.
The minute indication flashes.



4 Press ⏮/⏭ repeatedly to set the minute.

5 Press ENTER.
The clock starts working.

To reset the system clock

You can reset the system clock when the system is on.

1 Press TIMER SET.
2 Press ⏮/⏭ repeatedly until "SET CLOCK" appears, then press ENTER.
3 Repeat step 2 to 5 in "Step 2: Setting the time".

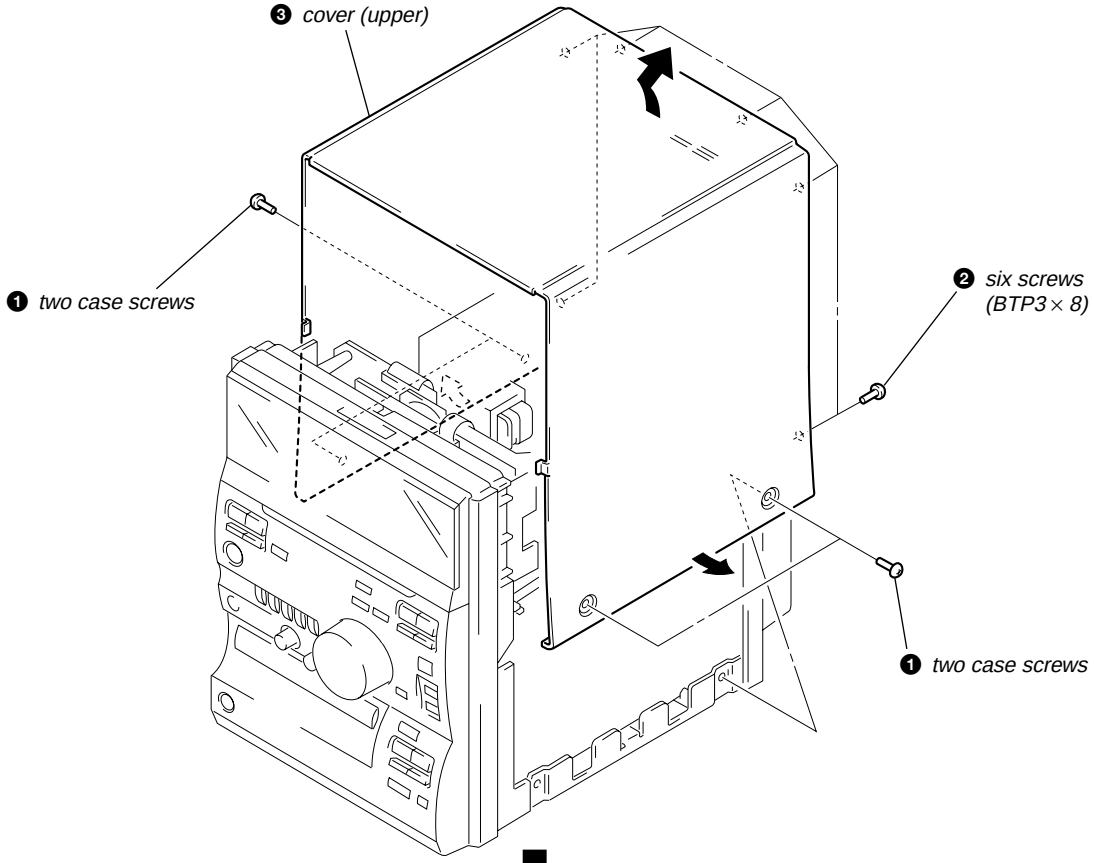
Tip

If you make a mistake, start over from step 1.

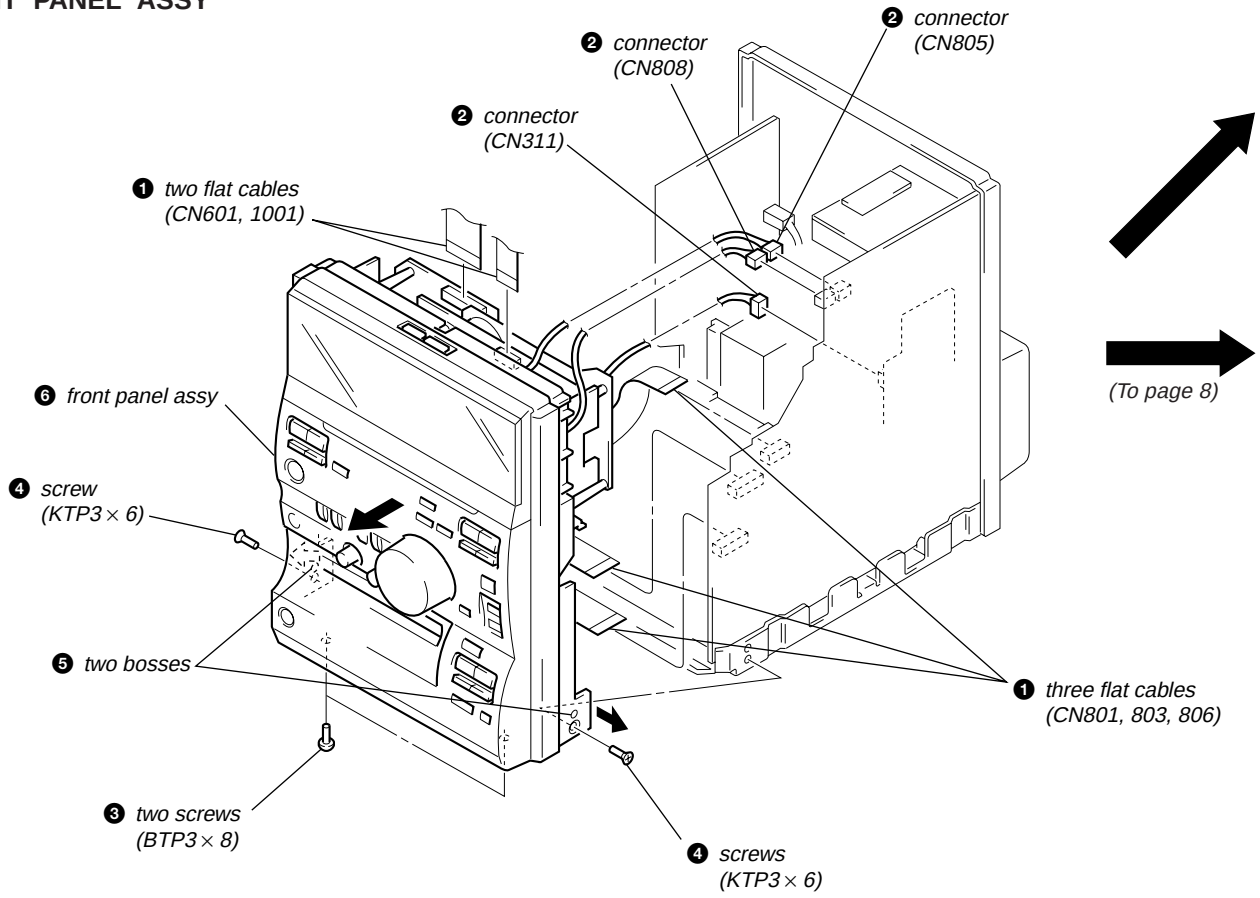
SECTION 3
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

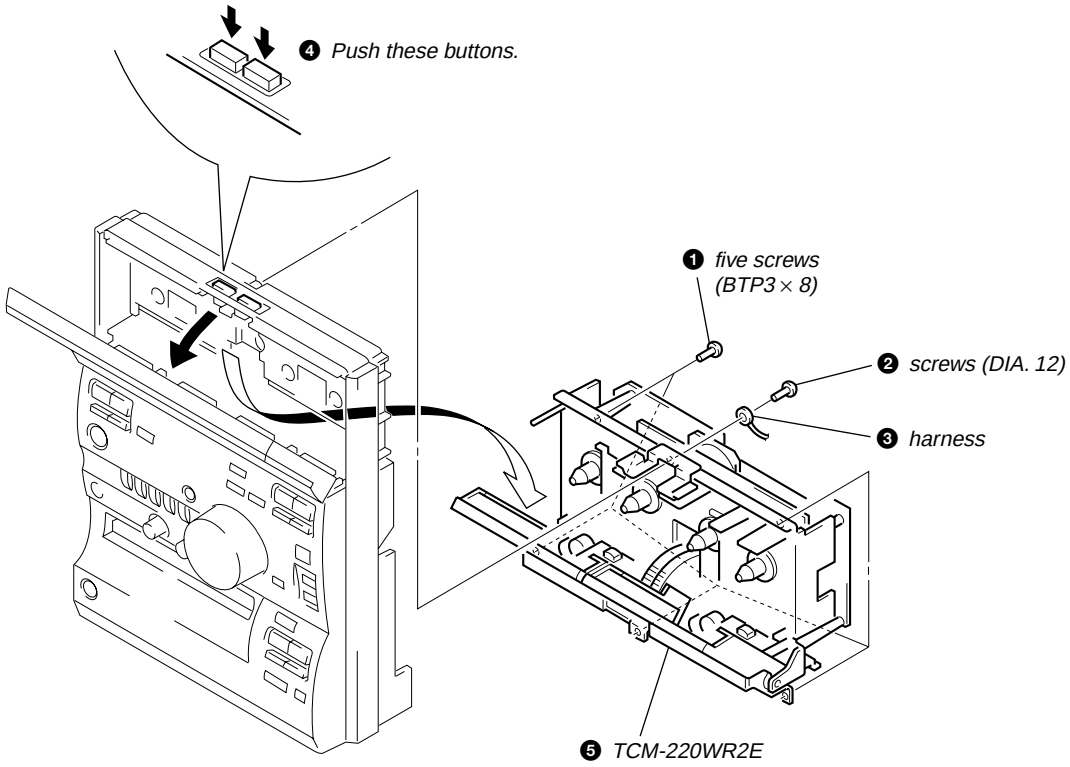
COVER (UPPER)



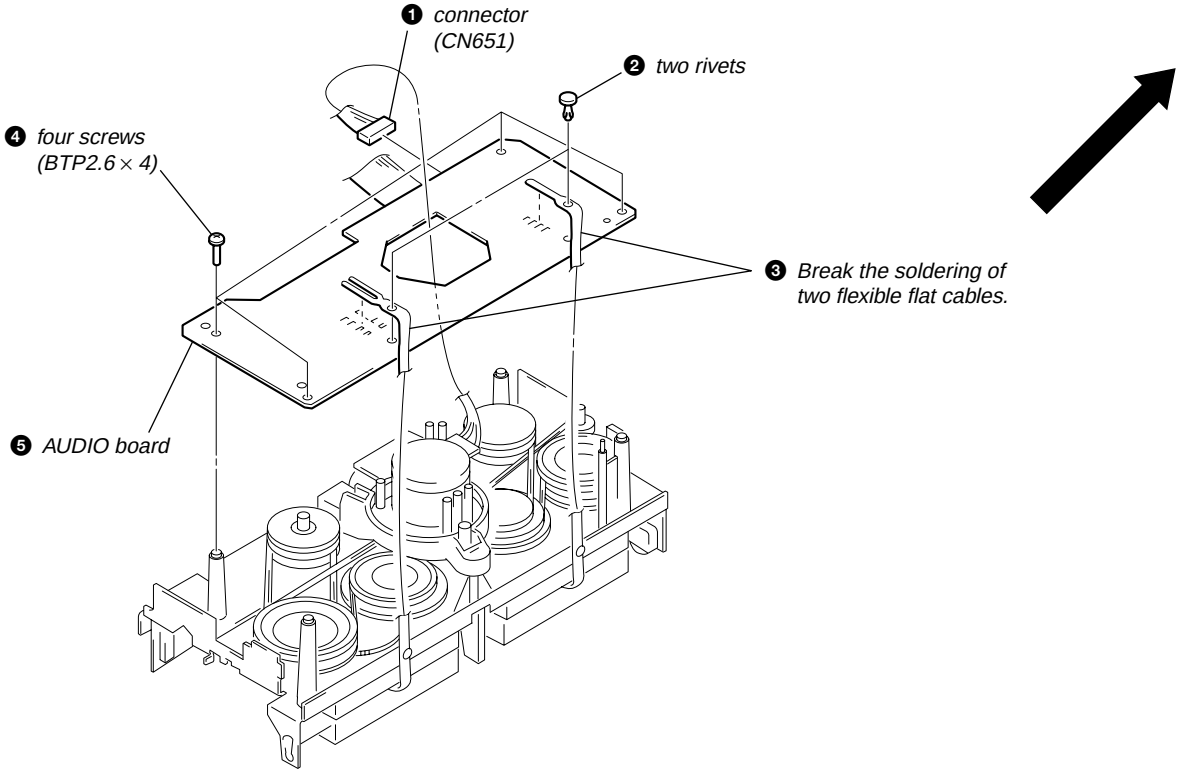
FRONT PANEL ASSY



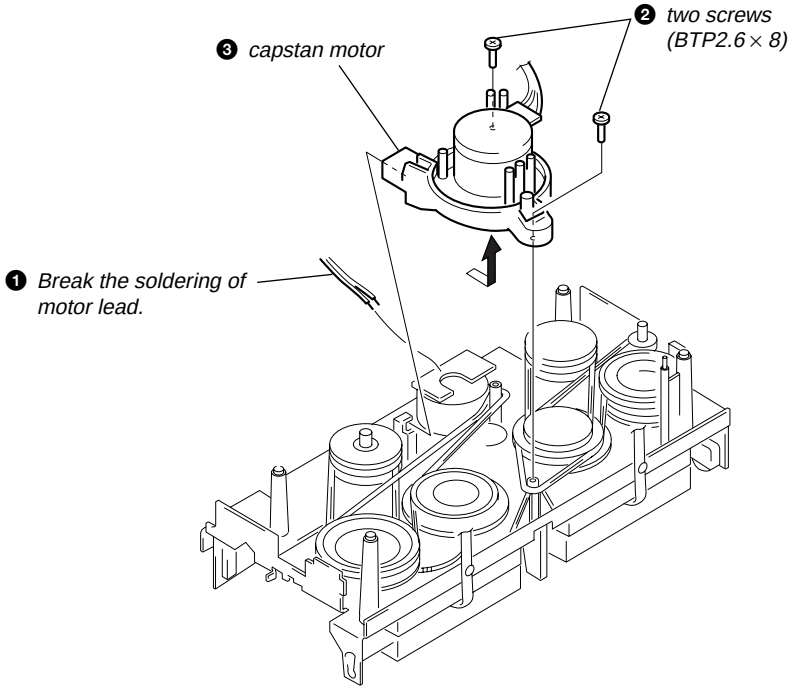
TAPE MECHANISM DECK (TCM-220WR2E)



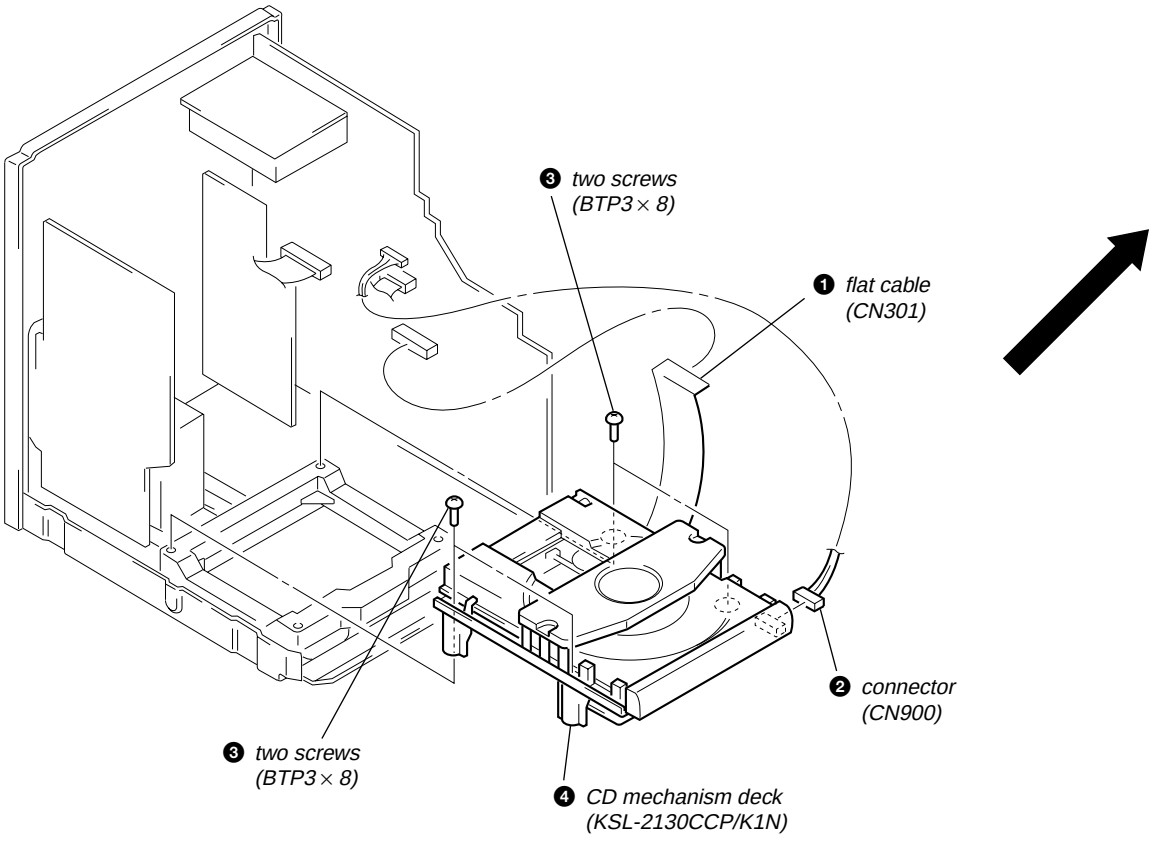
AUDIO BOARD



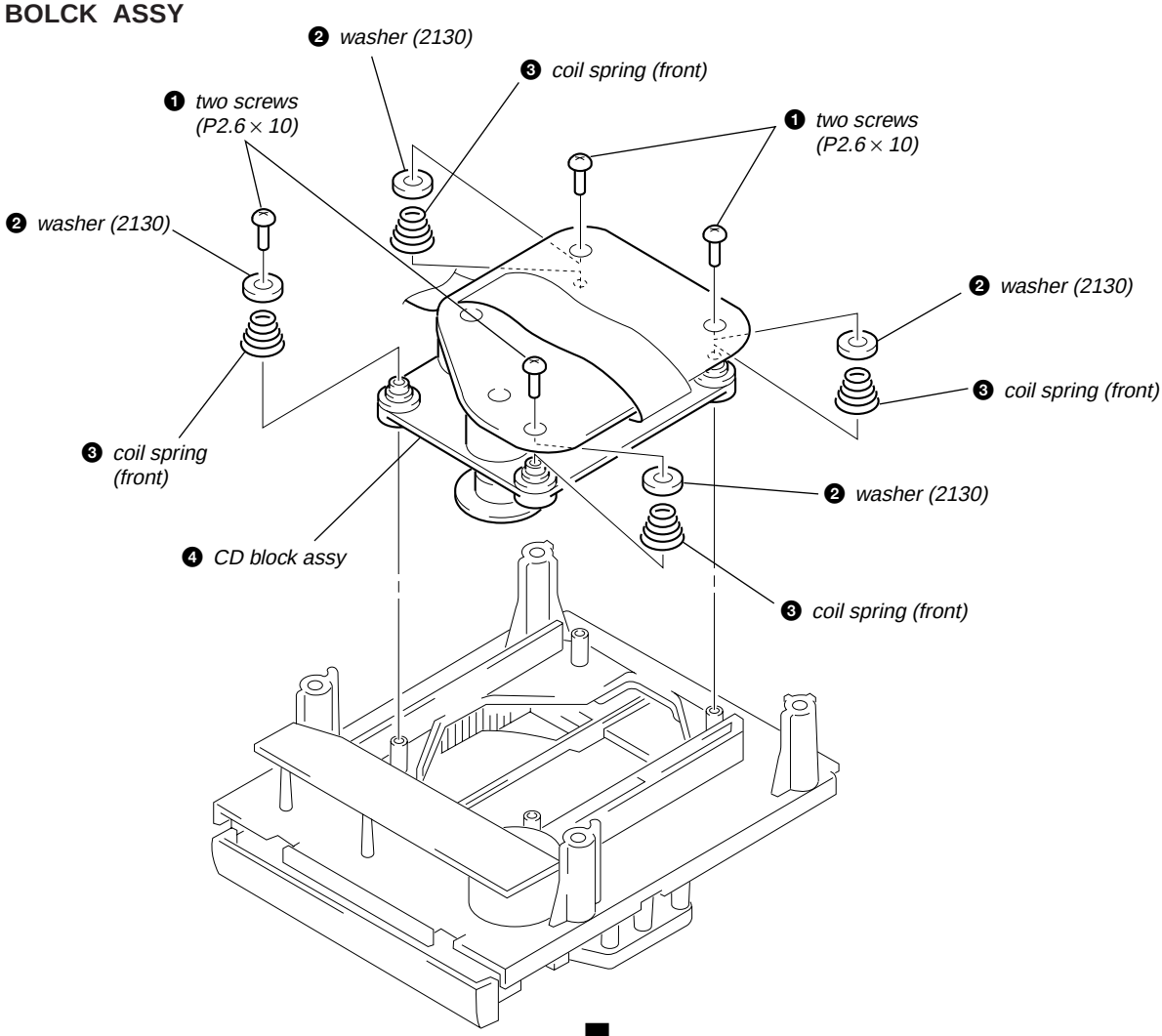
CAPSTAN MOTOR



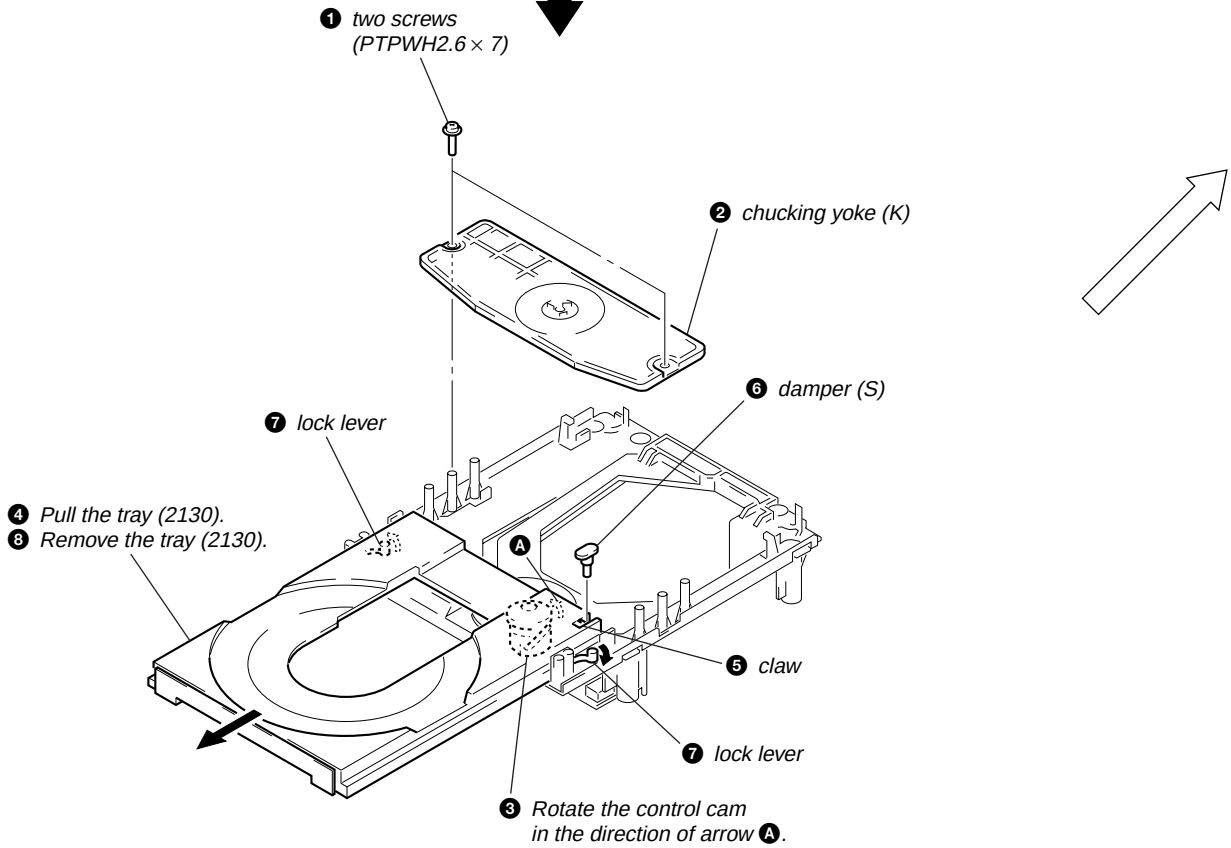
CD MECHANISM DECK (KSL-2130CCP/K1N)



CD BOLCK ASSY

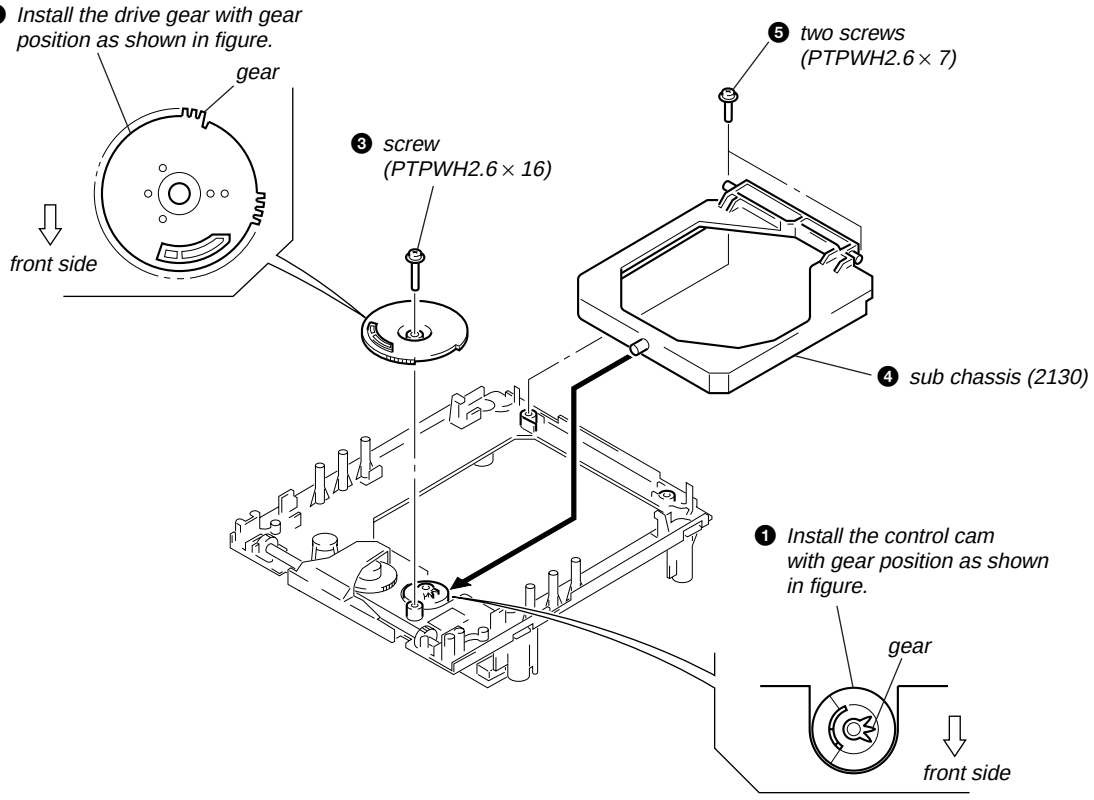

❷ washer (2130)
❸ coil spring (front)
❶ two screws (P2.6 × 10)
❶ two screws (P2.6 × 10)
❷ washer (2130)
❷ washer (2130)
❸ coil spring (front)
❸ coil spring (front)
❷ washer (2130)
❹ CD block assy
❸ coil spring (front)

TRAY (2130)


❶ two screws (PTPWH2.6 × 7)
❷ chucking yoke (K)
❻ damper (S)
❼ lock lever
❹ Pull the tray (2130).
❽ Remove the tray (2130).
Ⓐ
❺ claw
❼ lock lever
❸ Rotate the control cam in the direction of arrow Ⓐ.

• SUB CHASSIS (2130) INSTALLATION

Note: Follow the assembly procedure in the numerical order given.


❷ Install the drive gear with gear position as shown in figure.
gear
front side
❸ screw (PTPWH2.6 × 16)
❺ two screws (PTPWH2.6 × 7)
❹ sub chassis (2130)
❶ Install the control cam with gear position as shown in figure.
gear
front side

SECTION 4
TEST MODE

[MC Cold Reset]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. While pressing the I/⏻ button, connect the power cord.
2. The set is reset.

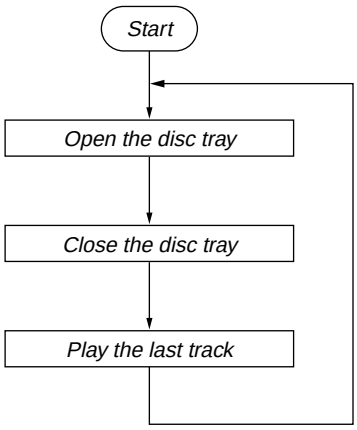
[CD Aging Mode]

This mode can be used for operation check of CD section.

Procedure:

1. Load a CD disc.
2. Set to standby state.
3. Press three buttons of ■ (TAPE B), ■ (CD), and TUNER simultaneously.
4. The aging is executed in bellow sequence.
5. To release from the aging mode, press the I/⏻ button to turn the power OFF.

Aging mode sequence:



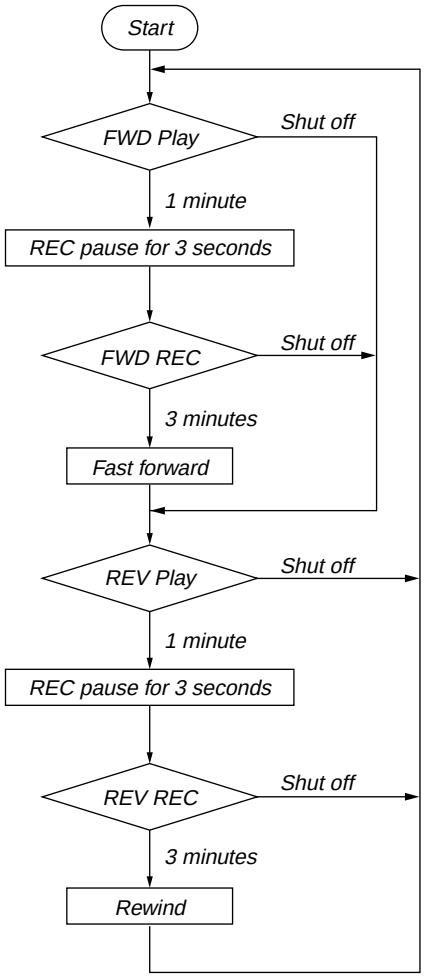
[Tape Deck Aging Mode]

This mode can be used for operation check of tape deck section.

Procedure:

1. Set a tape in the tape deck-B.
2. Set to standby state.
3. Press three buttons of ■ (TAPE B), ■ (CD), and TAPE simultaneously.
4. The aging is executed in bellow sequence.
5. To release from the aging mode, press the I/⏻ button to turn the power OFF.

Aging mode sequence:



[Liquid Crystal Display All Lit Check Mode]

Procedure:

1. Set to standby state.
2. Press three buttons of ■ (TAPE B), ■ (CD), and VIDEO simultaneously.
3. Liquid crystal display are all turned on.
4. To release from this mode, press the I/⏻ button to turn the power OFF.

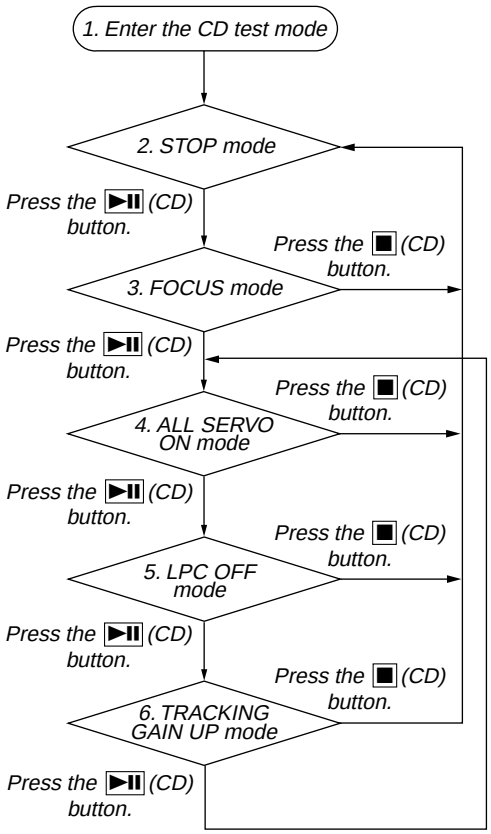
[ROM Version Display Mode]

Procedure:

1. Set to standby state.
2. Press three buttons of ■ (TAPE B), ■ (CD), and DSG simultaneously.
3. The ROM version is displayed.

[CD TEST MODE]
In the CD test mode, the set works as following sequence.

CD test mode sequence:

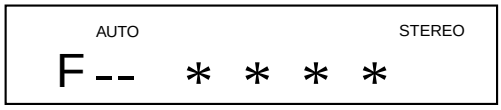

1. Enter the CD test mode
2. STOP mode
Press the ▶II (CD) button.
Press the ■ (CD) button.
3. FOCUS mode
Press the ▶II (CD) button.
Press the ■ (CD) button.
4. ALL SERVO ON mode
Press the ▶II (CD) button.
Press the ■ (CD) button.
5. LPC OFF mode
Press the ▶II (CD) button.
Press the ■ (CD) button.
6. TRACKING GAIN UP mode
Press the ▶II (CD) button.

Note: TRACKING GAIN UP mode is not used in servicing.

1. Entering the CD Test Mode

1. Press the I/⏻ button to turn the power ON.
2. Press the EJECT⏏ button to open the disc tray, and put a disc.
3. Press the EJECT⏏ button to close the disc tray.
4. Press the I/⏻ button to turn the power OFF.
5. While pressing the both ■ (TAPE B) and ■ (CD) buttons, press the CD (function) button.
6. Enter the CD test mode, and display as below for a few seconds.

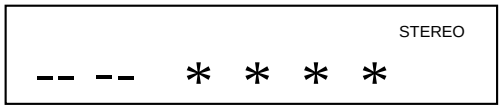
Display



Note: Lights up "STEREO" indication :LPC ON
Does not light up "STEREO" indication :LPC OFF
*) LPC: Laser power control

7. Then display as below, and enter the STOP mode.

Display



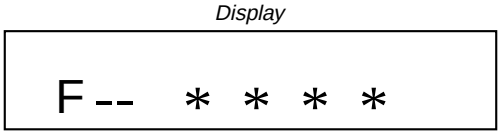
2. STOP Mode

1. Press the EJECT⏏ button twice to disc tray open and close. (All servo ON)
2. Press the ▶▶I and I◀◀ button to move the optical pick-up to position of the track where signal is recorded.

3. FOCUS Mode

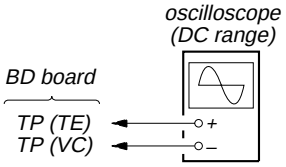
1. Press the ▶II button to enter the FOCUS mode and display as below. (Focus servo ON. CLV-S, tacking and sled servo OFF)

Display



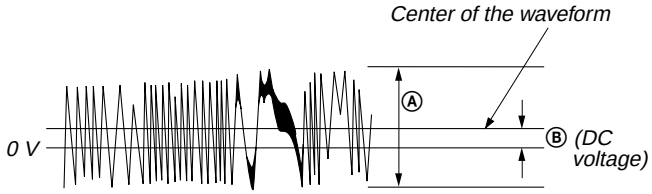
2. Connect an oscilloscope to TP (TE) and TP (VC) on the CD board.

Connection:



3. Confirm the traverse level and center values of waveform satisfy specified value as follows.

Traverse waveform

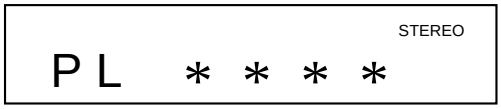


Specified value:
traverse level Ⓐ : more than 350 mVp-p
center values Ⓑ : 0 ± 50 mV

4. ALL SERVO ON Mode

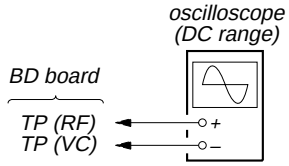
1. Press the [▶II] button to enter the ALL SERVO ON mode and display as below. (All servo ON)

Display



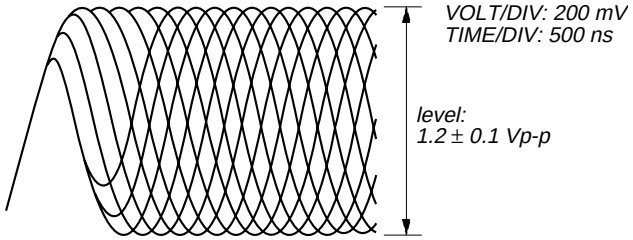
2. Connect an oscilloscope to TP (RF) and TP (VC) on the CD board.

Connection:



3. Confirm the RF level of waveform satisfy specified value as follows.

RF signal waveform

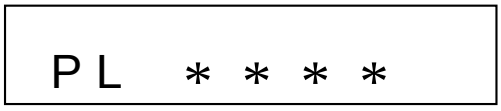


Specified value:
RF level: 1 ± 0.3 Vp-p

5. LPC OFF Mode

1. Press the [■] button to enter the LPC OFF mode and display as below. (LPC OFF)

Display



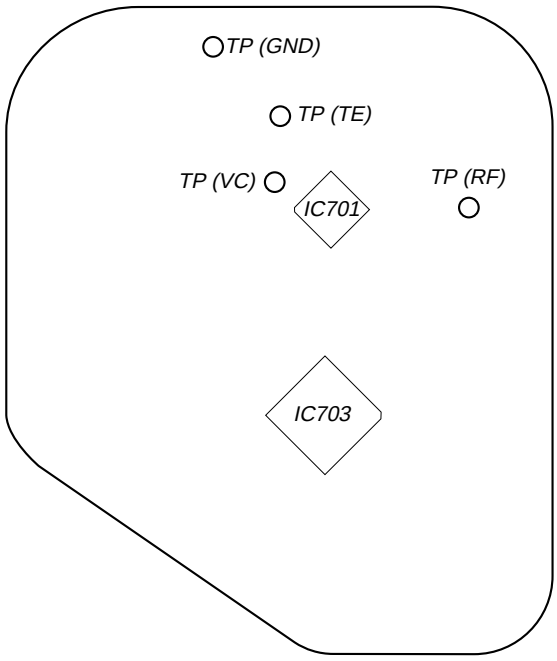
2. Confirm the RF level of waveform is the same as the RF level in “4. ALL SERVO ON mode”.
   If the RF level is down from the RF level in “4. ALL SERVO ON mode”, measure again after clean the object lens by an applicator with lens cleaning liquid.

6. Releasing the CD Test Mode

1. Press the [■] (CD) button to stop rotate the disc.
2. Press the [I/⏻] button to release the CD test mode and turn the power OFF.

Connecting Location:

– CD BOARD (Conductor Side) –



SECTION 5
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured-alcohol-moistened swab:
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

• Torque Measurement
• Tape Tension Measurement

• Torque Measurement

Mode	Torque Meter	Meter Reading
Forward	CQ-102C	36 to 61 g•cm (0.50 – 0.84 oz•inch)
Forward Back Tension	CQ-102C	2 to 6 g•cm (0.026 – 0.082 oz•inch)
Reverse	CQ-102RC	36 to 61 g•cm (0.50 – 0.84 oz•inch)
Reverse Back Tension	CQ-102RC	2 to 6 g•cm (0.026 – 0.082 oz•inch)
FF, REW	CQ-201B	61 to 143 g•cm (0.85 – 1.98 oz•inch)

• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
Forward	CQ-403A	more than 100 g (3.52 oz)
Reverse	CQ-403R	more than 100 g (3.52 oz)

SECTION 6
ELECTRICAL ADJUSTMENTS

TAPE DECK SECTION 0 dB=0.775 V

1. Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment)
6. The adjustments should be performed for both L-CH and R-ch.
7. Switches and controls should be set as follows unless otherwise specified.

• Test Tape

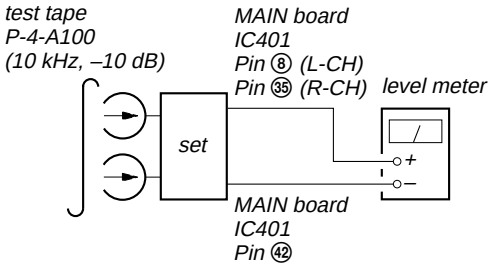
Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

Record/ Playback Head Azimuth Adjustment

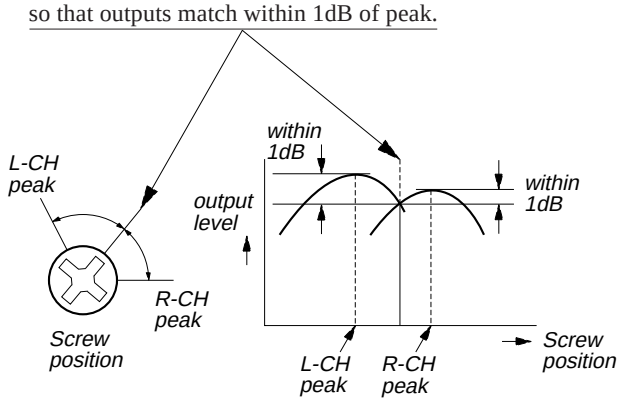
DECK A **DECK B**

Note: Perform this adjustments for both decks

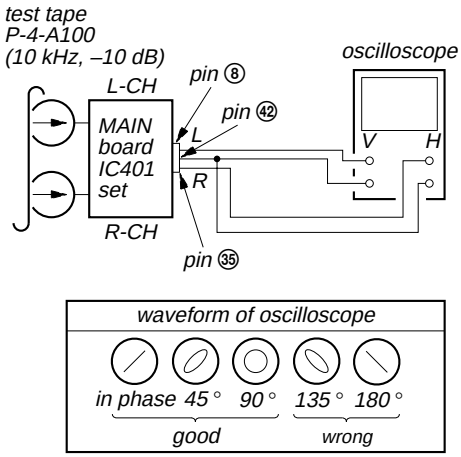
Procedure:



1. Mode: Playback (FWD)
2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.

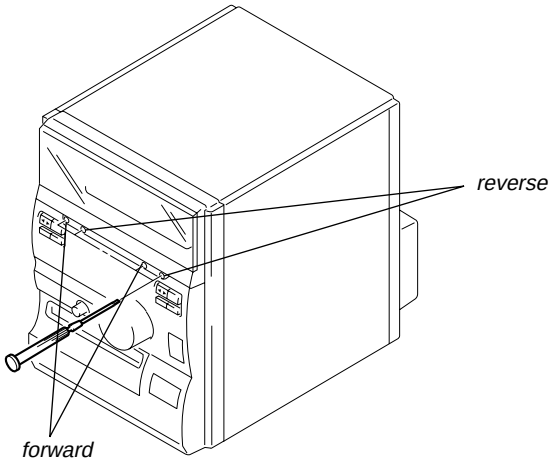


3. Mode: Playback (FWD)



4. Repeat steps 1 to 3 in playback (REV) mode.
5. After the adjustments, apply suitable locking compound to the pats adjusted.

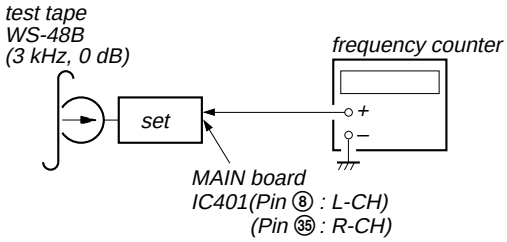
Adjustment Location: Record/Playback Head (Deck A and B) and MAIN board.



Tape Speed Adjustment **DECK A**

Procedure:

Turn the power switch on.
Mode: Playback (FWD)



1. Insert the WS-48B into the deck A and the blank tape into the deck B.
2. Press the HI-SPEED DUBBING button and ❚❚ button. Then at HIGH speed dubbing.
3. Adjust RV652 on the AUDIO board do that frequency counter reads 6,000 ± 180 Hz.
4. Press the ■ (TAPE A or B) button to stop the HIGH speed dubbing.
5. Press the REC●, ❚❚ and ◀▶ button. Then at NORMAL speed dubbing.
6. Adjust RV651 on the AUDIO board so that frequency counter reads 3,000 ± 90 Hz.
7. Press the ■ (TAPE A or B) button to stop the NORMAL speed dubbing.
8. Frequency difference between deck A and deck B the beginning of the tape should be within ± 1.5%.

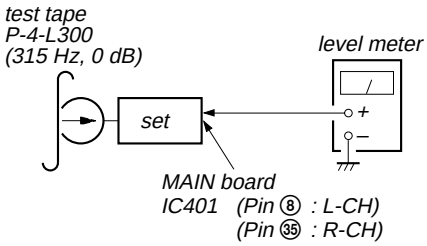
Adjustment Location: AUDIO and MAIN boards

Sample Value of Wow and flutter: 0.3% or less W. RMS (JIS) (WS-48B)

Playback level Adjustment **DECK A** **DECK B**

Procedure:

Mode: Playback (FWD)



Deck A is RV311 (L-CH) and RV411 (R-CH), Deck B is RV301 (L-CH) and RV401 (R-CH) so that adjustment within adjustment level as follows.

Adjustment Level:

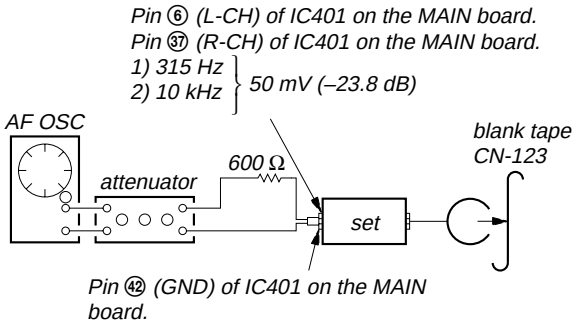
IC401 PB level: 301.5 to 338.3 mV (–8.2 to –7.2 dB) level difference between the channels: within ± 0.5 dB

Adjustment Location: AUDIO and MAIN boards

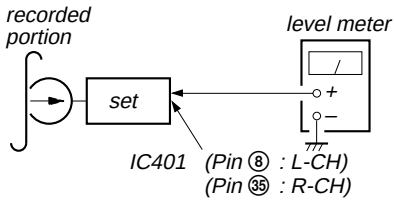
Record bias Current Adjustment DECK B

Procedure:

1. Mode: Record



2. Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.
If these levels do not adjustable limits, adjustment the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 1 and 2.

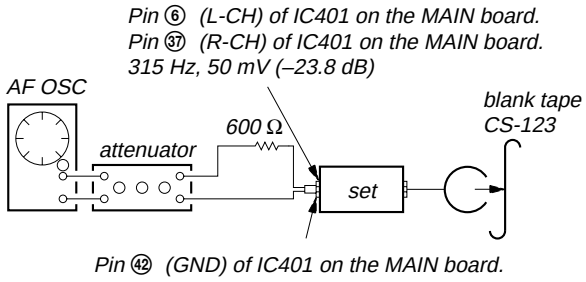
Adjustable limits: Playback output of 315 Hz to playback output of 10 kHz: 0 ± 0.5 dB

Adjustment Location: AUDIO and MAIN boards

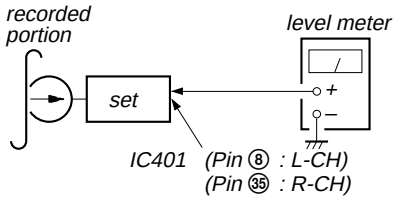
Record Level Adjustment DECK B

Procedure:

1. Mode: Record


Pin ⑥ (L-CH) of IC401 on the MAIN board.
Pin ㊲ (R-CH) of IC401 on the MAIN board.
315 Hz, 50 mV (–23.8 dB)
AF OSC
attenuator
600 Ω
set
blank tape
CS-123
Pin ㊷ (GND) of IC401 on the MAIN board.

2. Mode: Playback



Confirm playback the signal recorded in step 1 become adjustable limits as follows.
If these levels do not adjustable limits, adjustment the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 1 and 2.

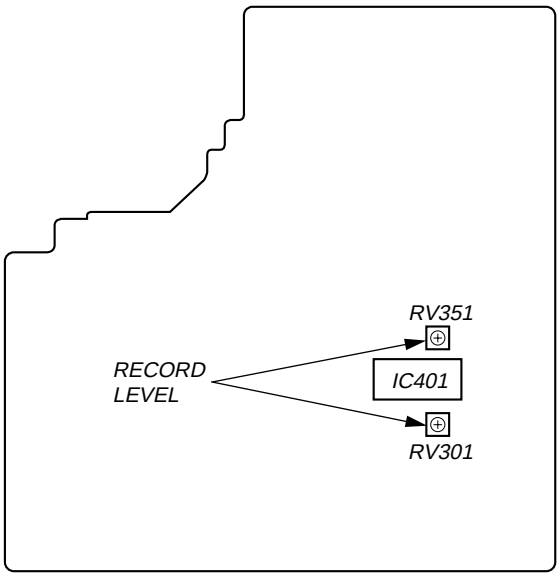
Adjustable limits:

IC401 PB level: 36.7 to 41.1 mV (–26.5 to –25.5 dB)

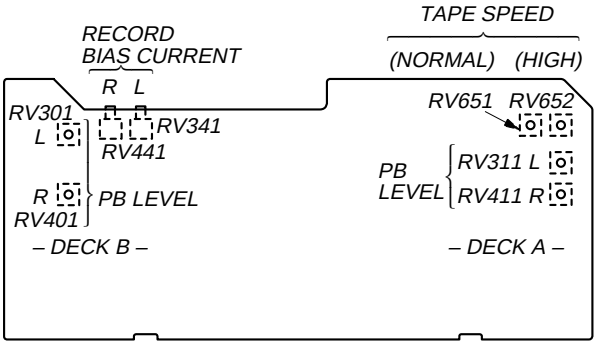
Adjustment Location: MAIN board

Adjustment Location:

– MAIN BOARD (Component Side) –



– AUDIO BOARD (Conductor Side) –



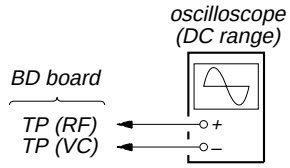
* As the adjustment parts is mounted on the component side, adjust it through a hole in the AUDIO board form conductor side. (Except RV431, 441)

CD SECTION

Note:

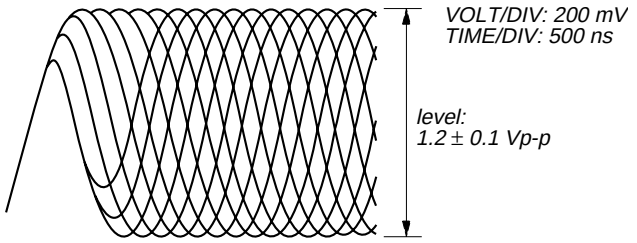
1. CD Block is basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10 MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Adjust the focus bias adjustment when optical block is replaced.

Focus Bias Check



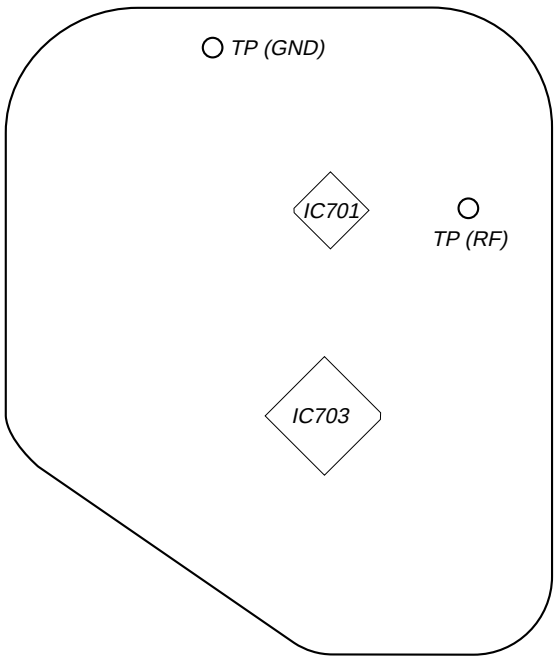
Procedure :

1. Connect oscilloscope to TP (RF) and TP (GND) on CD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and press the CD ▶II button to play-back.
4. Confirm that oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.



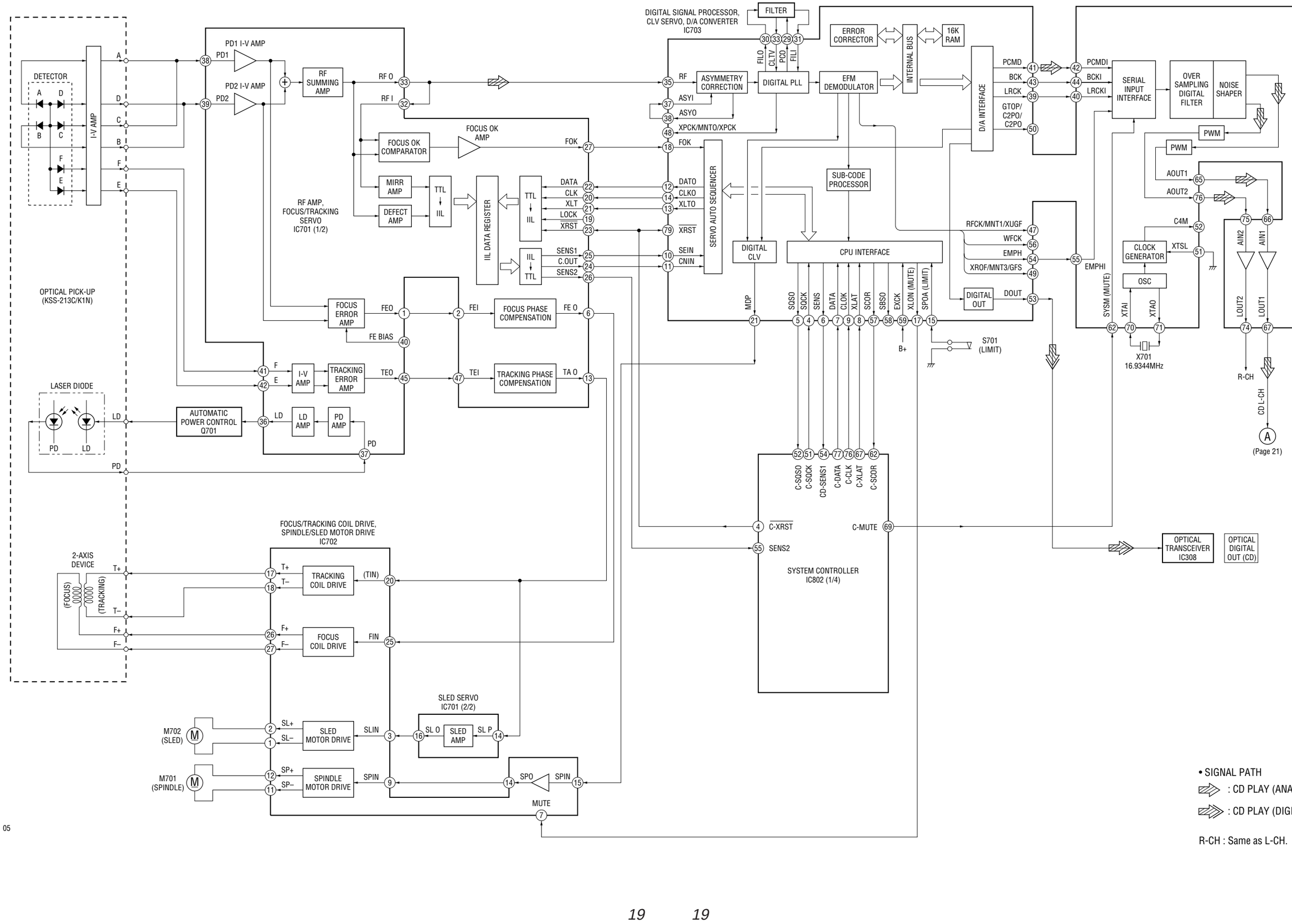
Adjustment Location:

– CD BOARD (Conductor Side) –

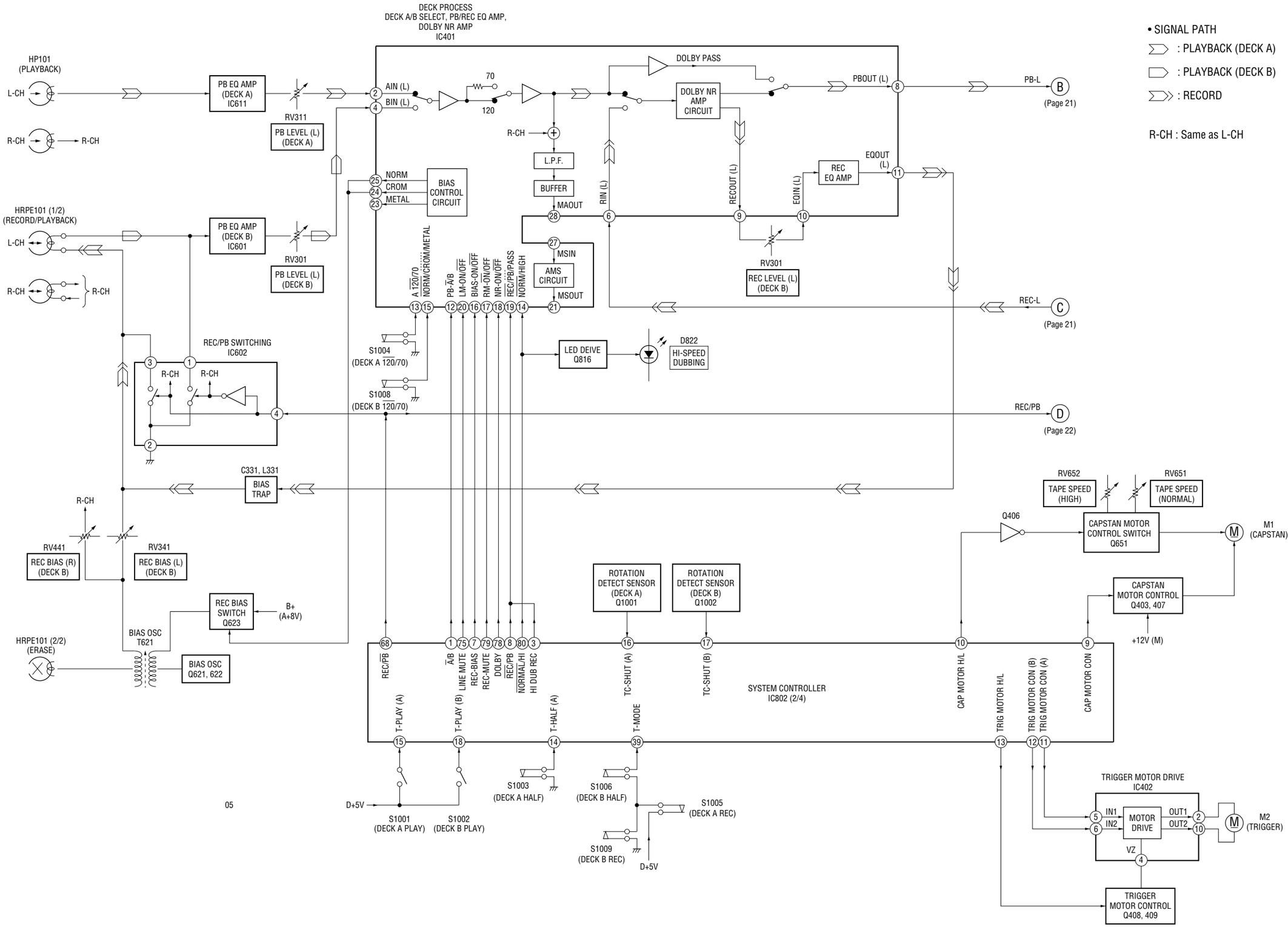


SECTION 7
DIAGRAMS

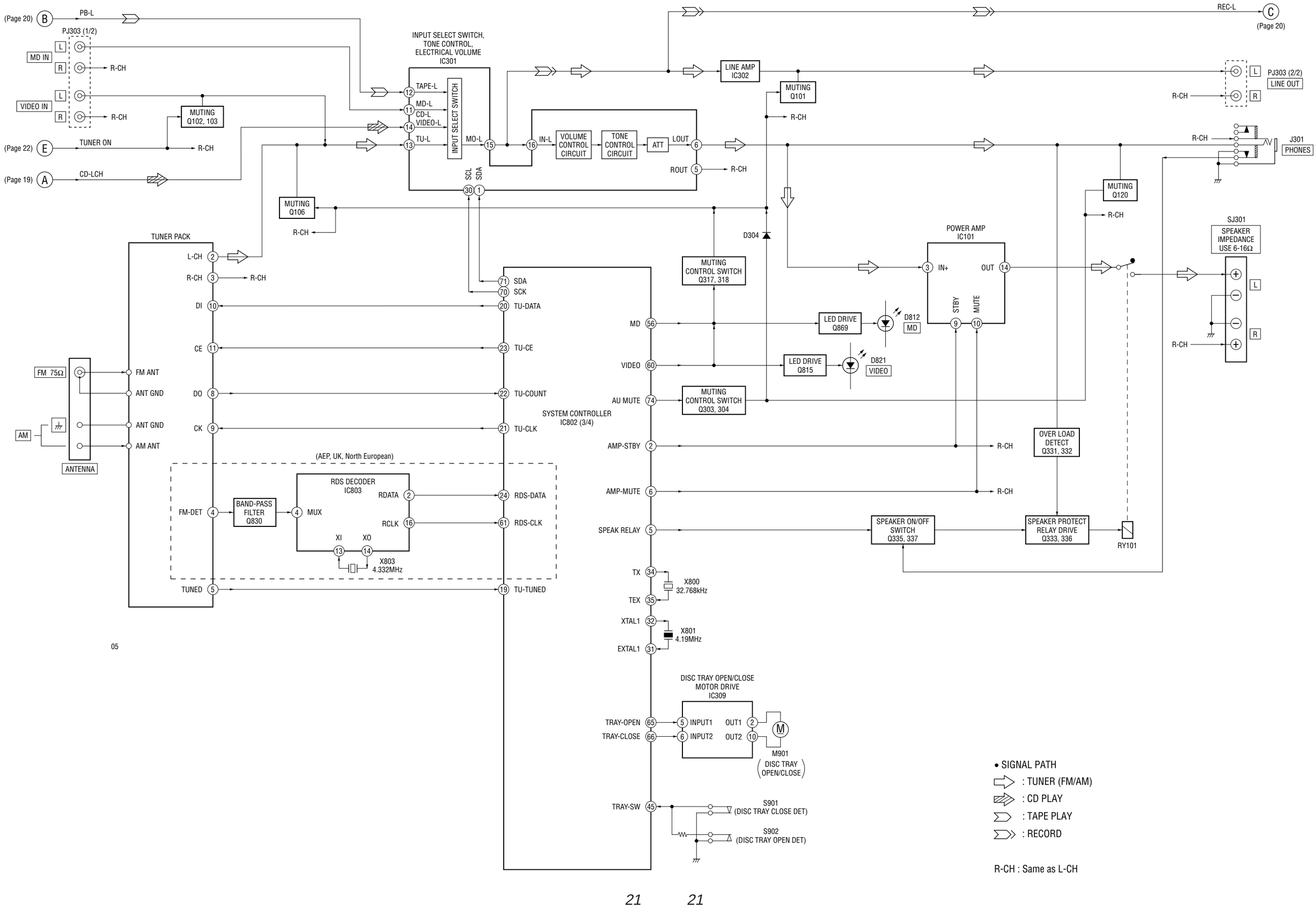
7-1. BLOCK DIAGRAM – CD Section –



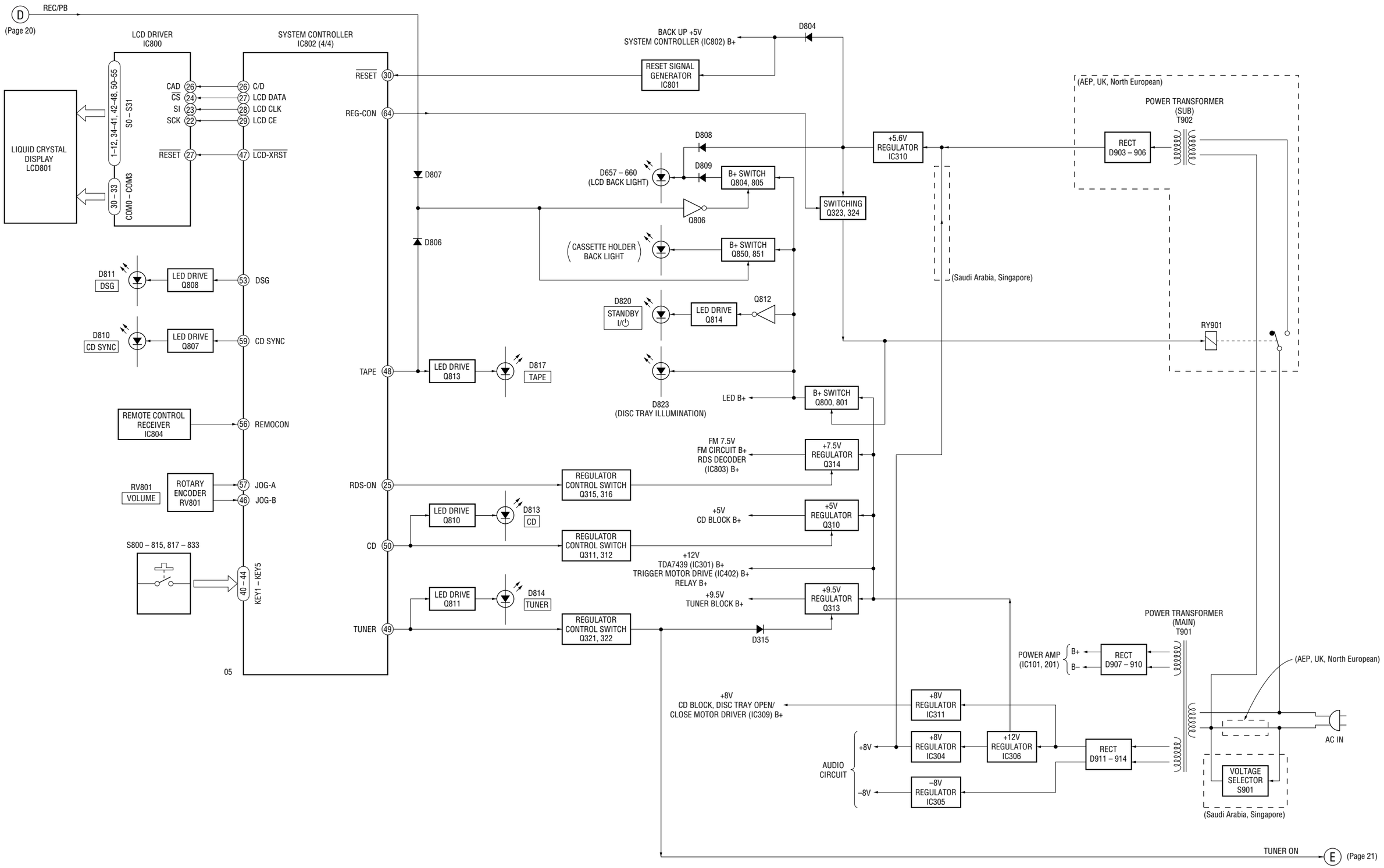
7-2. BLOCK DIAGRAM – TAPE DECK Section –



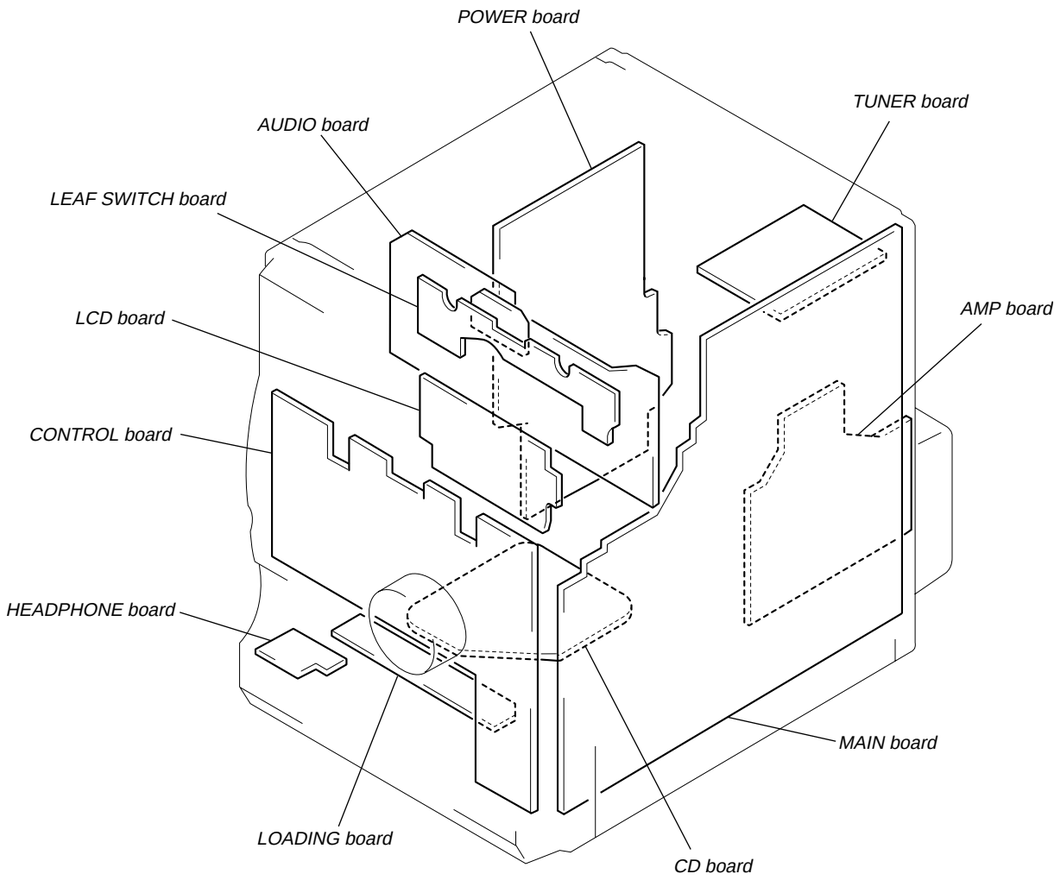
7-3. BLOCK DIAGRAM – MAIN Section –



7-4. BLOCK DIAGRAM – DISPLAY/POWER SUPPLY Section –



• Circuit Boards Location



7-5. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGARAMS

Note on Printed Wiring Board:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ▒▒▒ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ⊣⊢ : fusible resistor.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

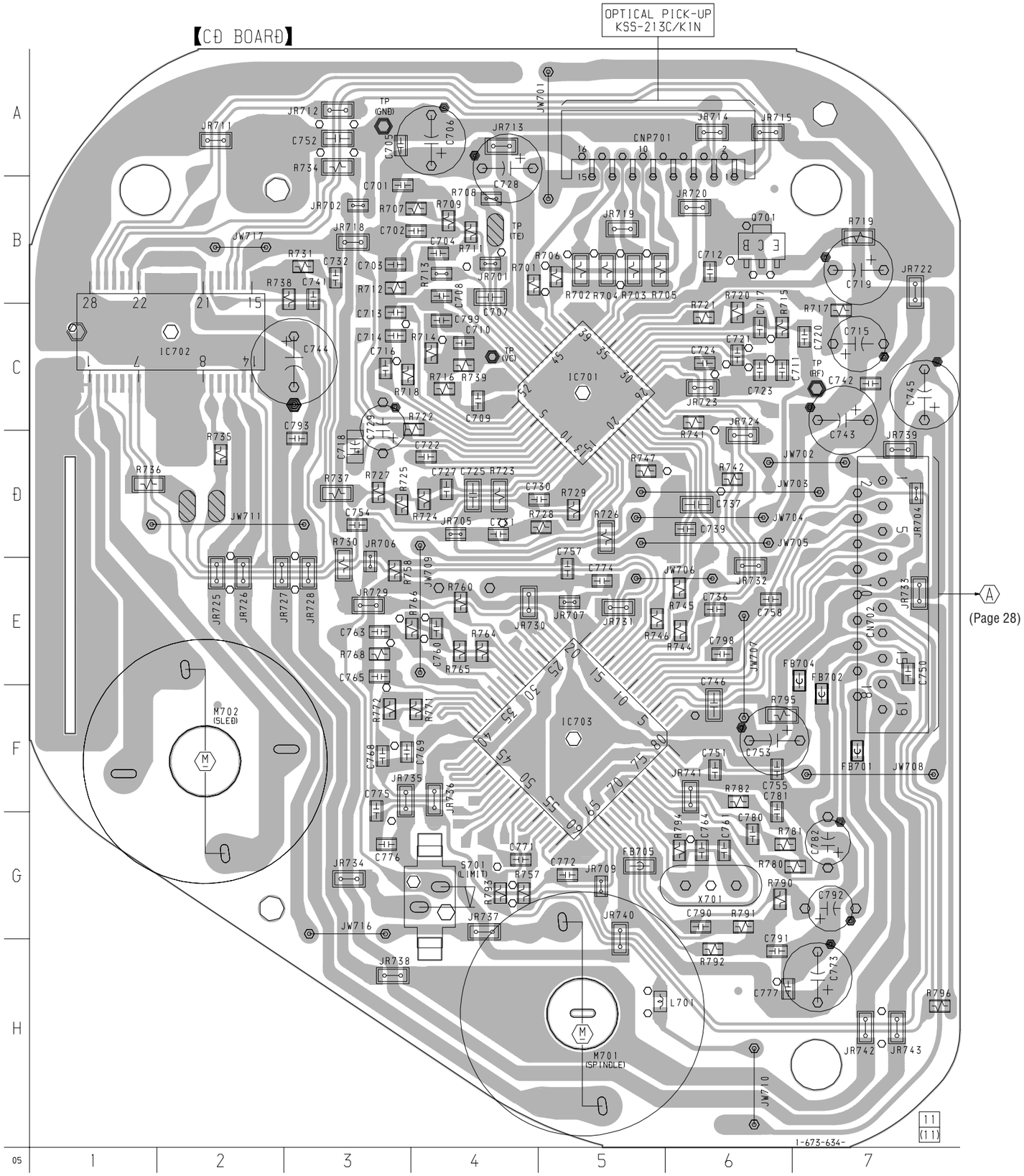
- B+ : B+ Line.
- B− : B– Line.
- ▭ : adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - ⇨ : TUNER (FM/AM)
  - ⇨ : PLAYBACK (DECK A)
  - ⇨ : PLAYBACK (DECK B)
  - ⇨ :RECORD
  - ⇨ : CD PLAY (ANALOG OUT)
  - ⇨ : CD PLAY (DIGITAL OUT)
- Abbreviation
  - AED : North European model
  - EA : Saudi Arabia model
  - SP : Singapore model

7-6. PRINTED WIRING BOARD – CD Section –

• See page 23 for Circuit Boards Location.

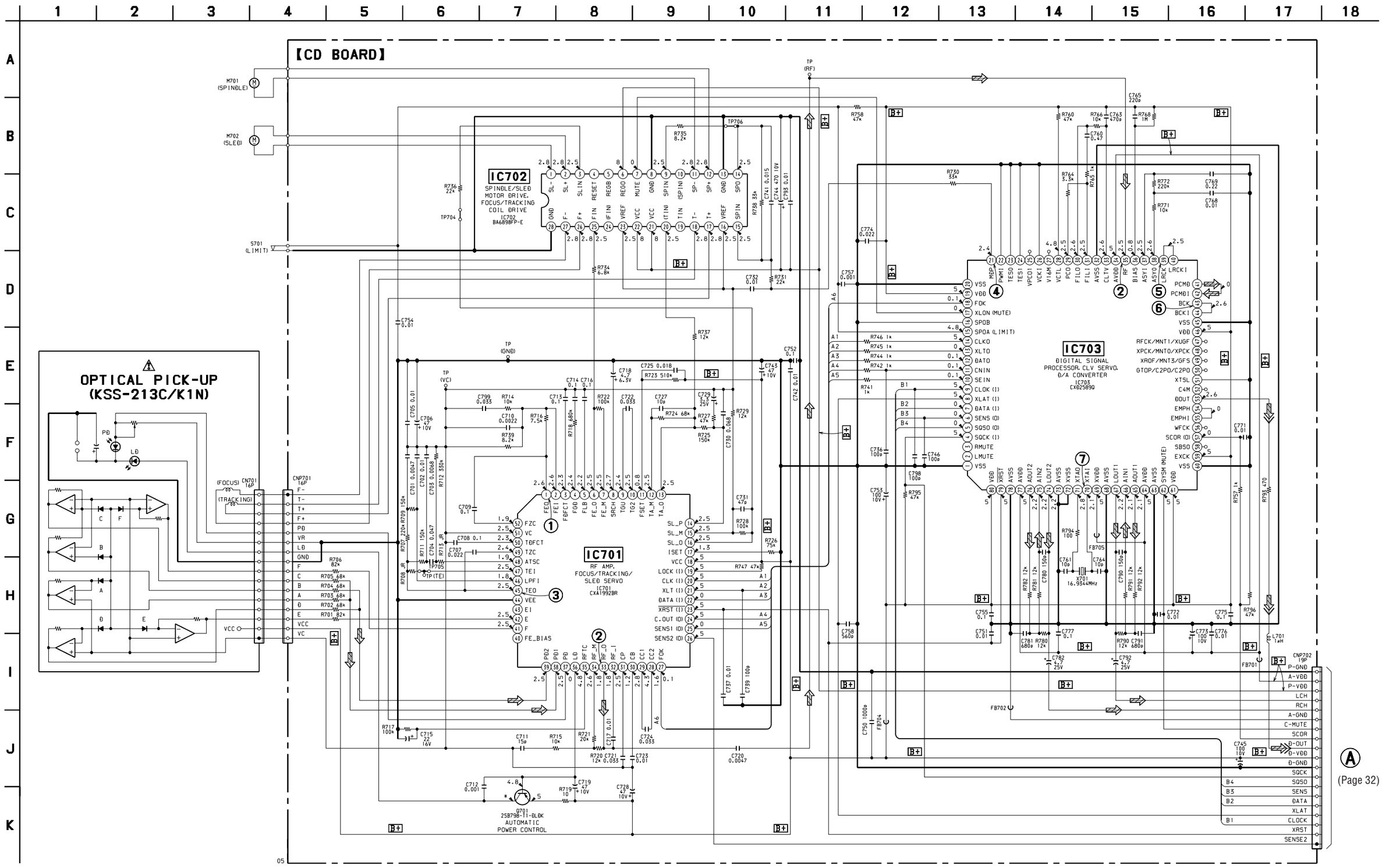
• **Semiconductor Location**

Ref. No.	Location
IC701	C-5
IC702	C-2
IC703	F-5
Q701	B-6



7-7. SCHEMATIC DIAGRAM – CD Section –

• See page 30 for Waveforms. • See page 39 for IC Block Diagrams.

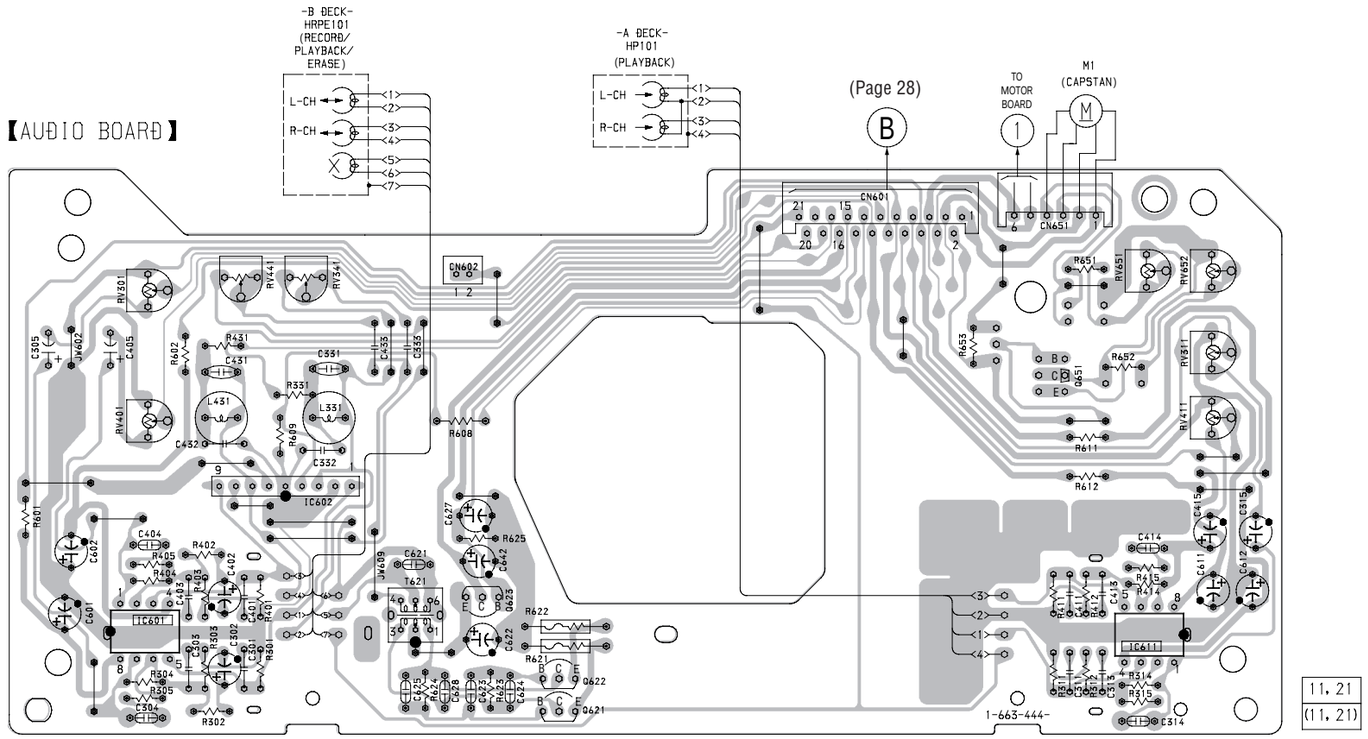


- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : CD PLAY
  ∗ : Impossible to measure

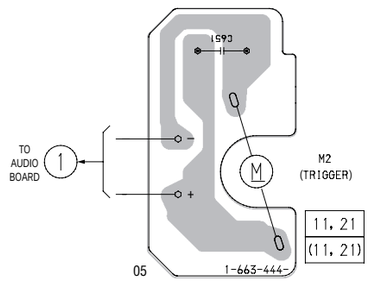
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-8. PRINTED WIRING BOARDS – TAPE DECK Section – • See page 23 for Circuit Boards Location.

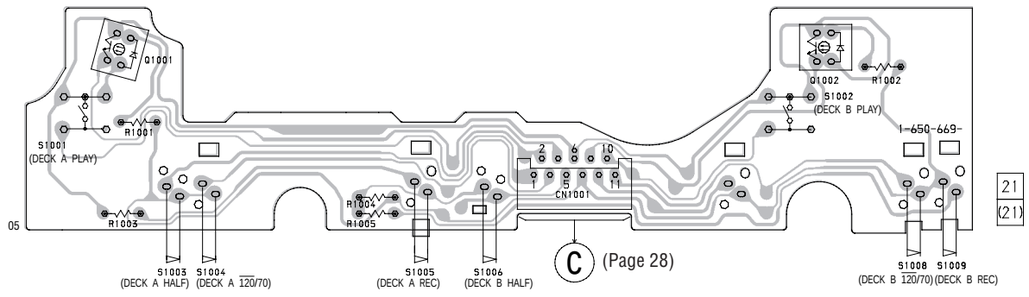
【AUDIO BOARD】



【MOTOR BOARD】

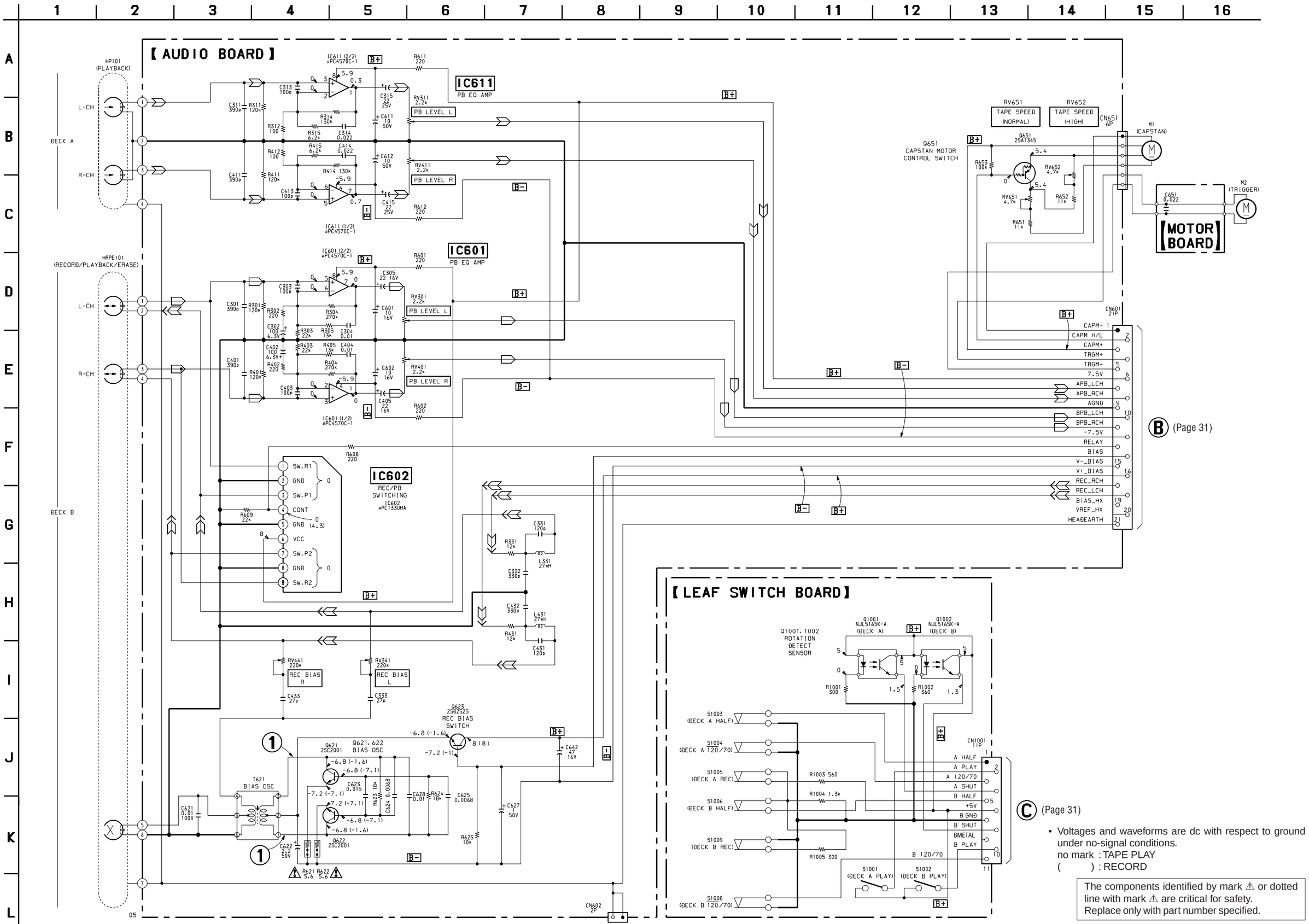


【LEAF SWITCH BOARD】



7-9. SCHEMATIC DIAGRAM – TAPE DECK Section –

• See page 30 for Waveform. • See page 42 for IC Block Diagram.



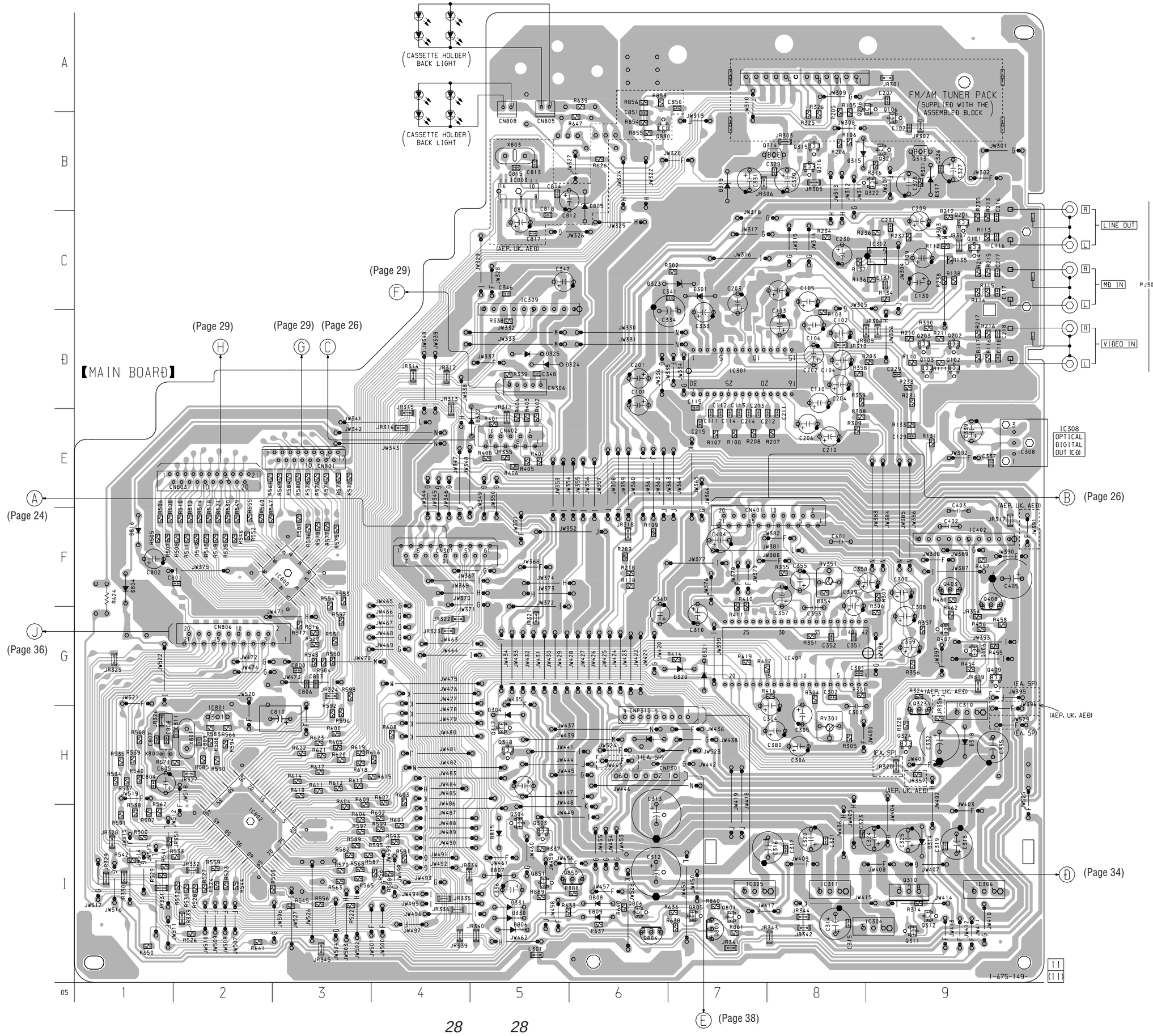
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : TAPE PLAY
  ( ) : RECORD

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-10. PRINTED WIRING BOARD – MAIN Board – • See page 23 for Circuit Boards Location.

• **Semiconductor Location**

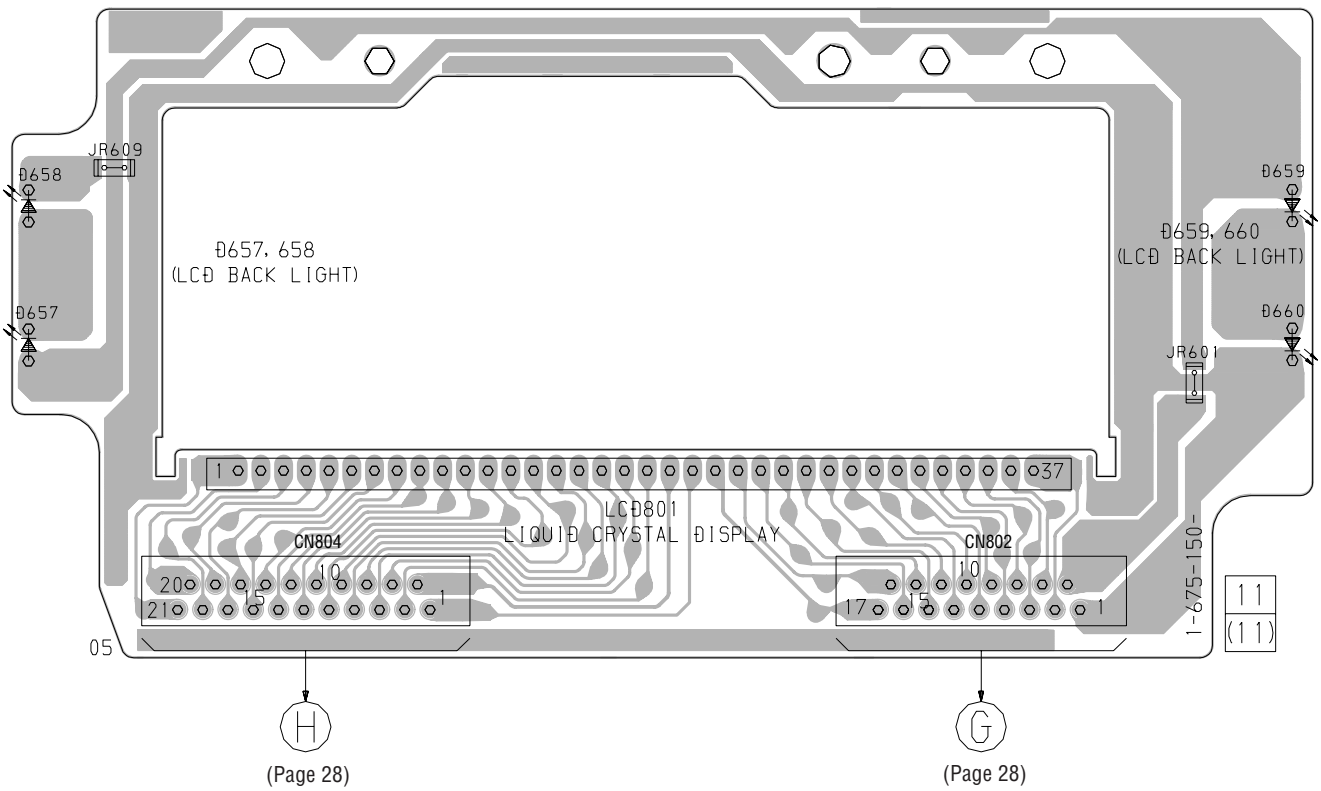
Ref. No.	Location
D301	C-7
D304	H-5
D314	I-9
D315	B-8
D317	B-9
D318	H-9
D319	B-7
D320	G-7
D321	G-7
D322	E-5
D323	C-7
D324	D-5
D325	D-5
D330	I-5
D331	I-5
D804	F-1
D805	B-6
D806	I-5
D807	I-5
D808	I-6
D809	I-6
D815	I-5
D816	F-1
IC301	D-7
IC302	C-9
IC304	I-9
IC305	I-7
IC306	I-9
IC308	E-9
IC309	C-5
IC310	H-9
IC311	I-8
IC401	G-8
IC402	F-9
IC800	F-3
IC801	H-2
IC802	I-2
IC803	B-5
Q101	C-9
Q102	D-9
Q103	D-9
Q106	B-9
Q201	C-9
Q202	D-9
Q203	D-9
Q206	A-9
Q303	I-5
Q304	I-5
Q310	I-9
Q311	I-9
Q312	I-9
Q313	B-9
Q314	B-8
Q315	B-8
Q316	B-8
Q317	H-5
Q318	H-5
Q321	B-9
Q322	B-9
Q323	H-9
Q324	H-9
Q403	F-9
Q406	G-9
Q407	G-9
Q408	F-9
Q409	G-9
Q800	I-7
Q801	I-7
Q804	I-6
Q805	I-7
Q806	I-6
Q830	B-6
Q850	I-6
Q851	I-5



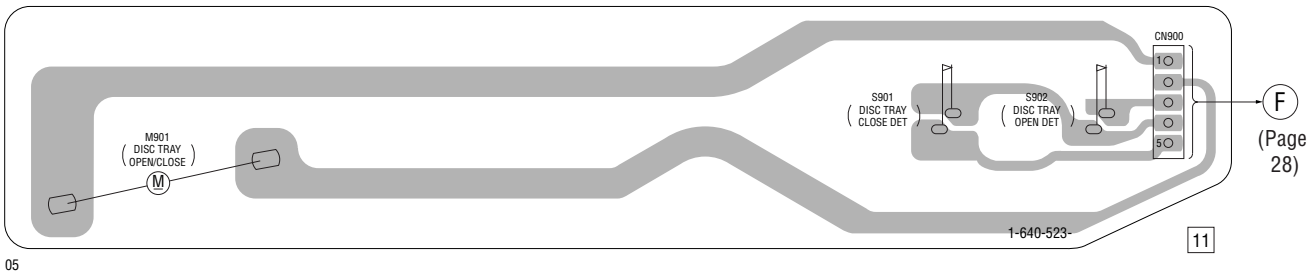
7-11. PRINTED WIRING BOARDS – LCD/LOADING Boards –

• See page 23 for Circuit Boards Location.

【LCD BOARD】



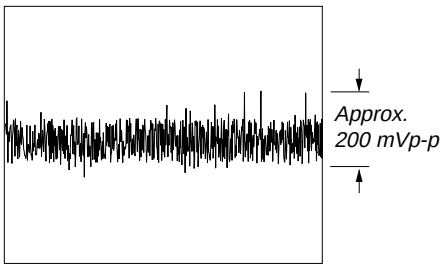
【LOADING BOARD】



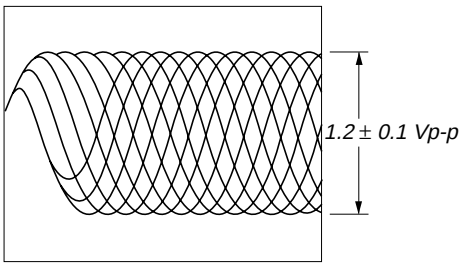
• Waveforms

– CD Board –

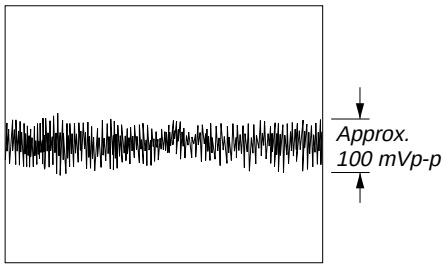
❶ IC701 ① (FEO) (CD Play Mode)



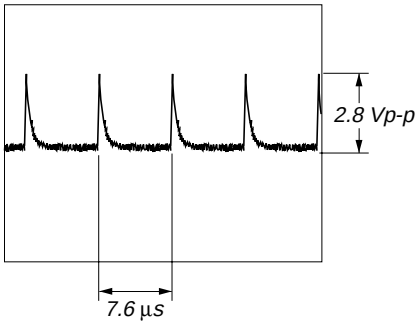
❷ IC701 ㉝ (RF O), IC703 ㉟ (RF)
(CD Play Mode)



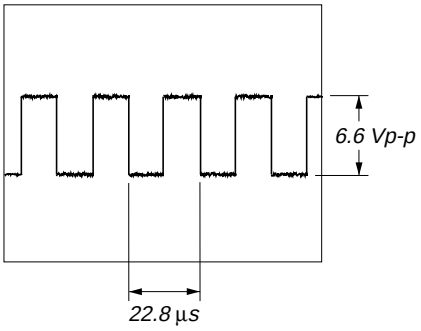
❸ IC701 ㊺ (TEO) (CD Play Mode)



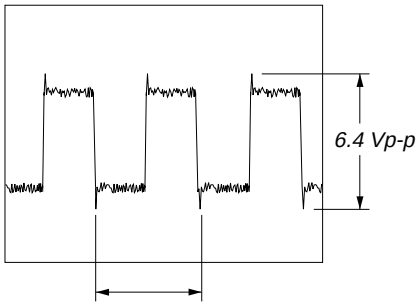
❹ IC703 ㉑ (MDP) (CD Play Mode)



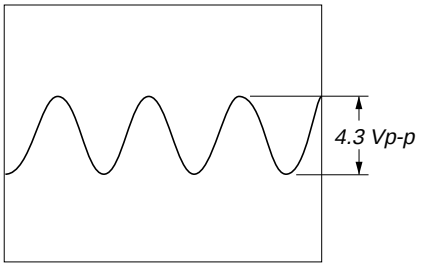
❺ IC703 ㊴ (LRCK) (CD Play Mode)



❻ IC703 ㊸ (BCK) (CD Play Mode)

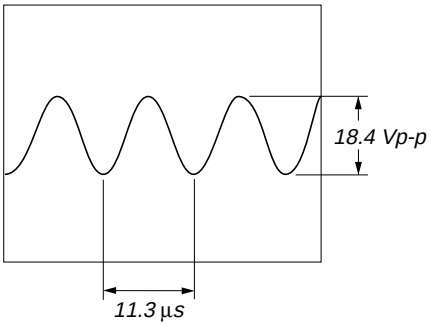


❼ IC703 ㊿ XTAI (CD Play Mode)



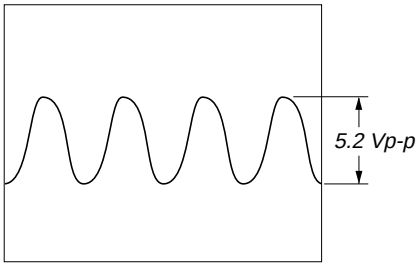
– AUDIO Board –

❶ Q621, 622 (Collector)
(Record Mode)

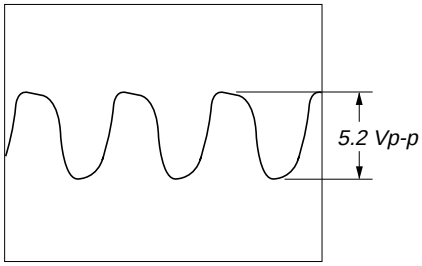


– MAIN Board –

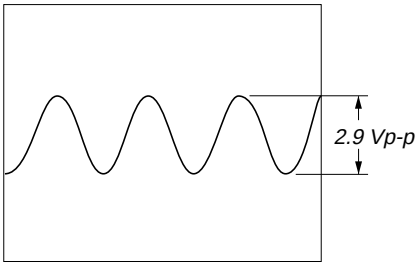
❶ IC802 ㉜ (XTAL1)



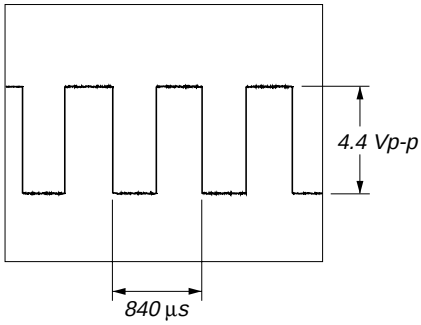
❷ IC802 ㉞ (TX)



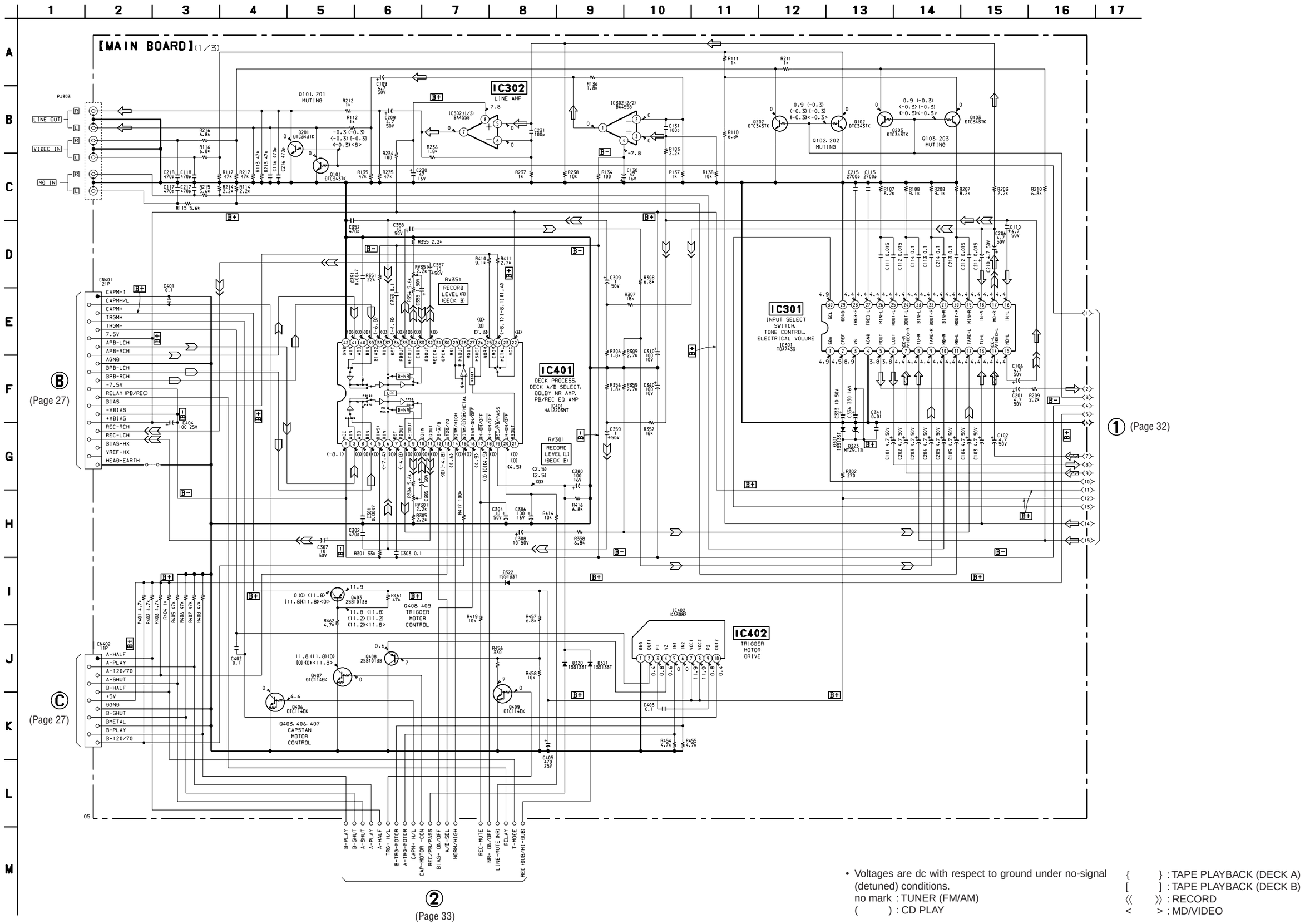
❸ IC803 ⑬ (XI)



❹ IC803 ⑯ (RCLK)

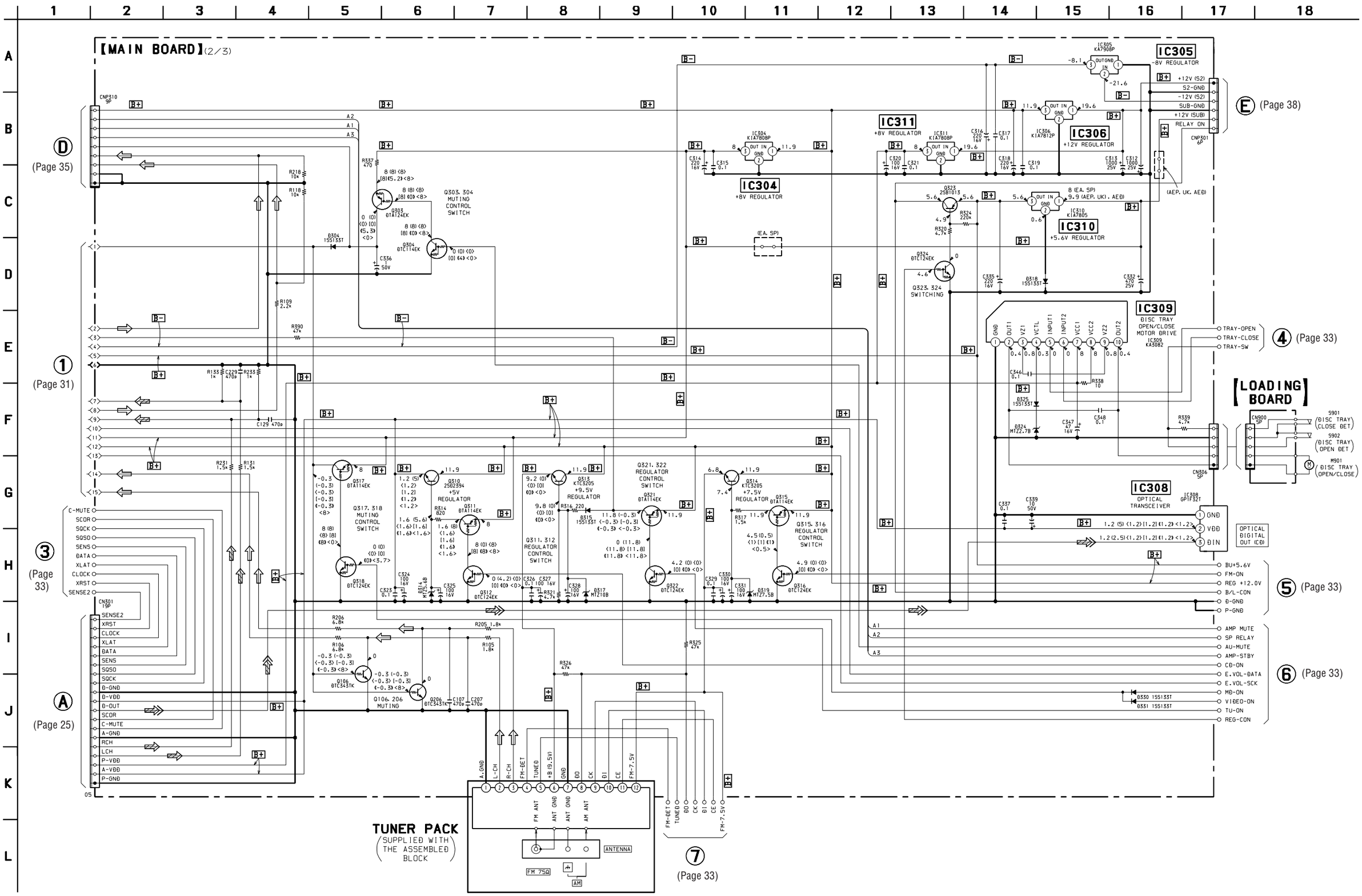


7-12. SCHEMATIC DIAGRAM – MAIN Section (1/3) – • See page 42 for IC Block Diagrams.



- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  { } : TAPE PLAYBACK (DECK A)
  [ ] : TAPE PLAYBACK (DECK B)
  ⟨⟨ ⟩⟩ : RECORD
  < > : MD/VIDEO

7-13. SCHEMATIC DIAGRAM – MAIN Section (2/3) – • See page 43 for IC Block Diagram.



- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  { } : TAPE PLAYBACK (DECK A)
  [ ] : TAPE PLAYBACK (DECK B)
  ⟨⟨ ⟩⟩ : RECORD
  < > : MD/VIDEO

7-14. SCHEMATIC DIAGRAM – MAIN Section (3/3) – • See page 30 for Waveforms. • See page 43 for IC Block Diagram.

【MAIN BOARD】(3/3)

【LCD BOARD】

LCD801
LIQUID CRYSTAL DISPLAY

PRESET AUTO REC CD-SYNC REPEAT 1 SHUFFLE PGM
STEREO
TUNED
MHZ
KHZ
DAILY REC SLEEP SURROUND1 SURROUND2 DBFB

D657-660
(LCD BACK LIGHT)

D457 SEL5686J4C -LF62
D458 SEL5686J4C -LF62
D459 SEL5686J4C -LF62
D460 SEL5686J4C -LF62

CN802 17P
CN801 17P
CN804 21P
CN803 21P

*1 IC802

PIN	VOLTAGE	PIN	VOLTAGE	PIN	VOLTAGE
16	4.6 (4.6) ⟨4.6⟩ [4.6] {4.6} ⟨4.6⟩	48	0 (0) ⟨4.7⟩ {4.7} ⟨4.7⟩	60	0 (0) ⟨0⟩ [0] {0} ⟨4.7⟩
17	4.6 (4.6) ⟨4.6⟩ [0] {0} ⟨4.6⟩	49	4.7 (0) ⟨0⟩ [0] {0} ⟨0⟩	61	2.1 (0) ⟨0⟩ [0] {0} ⟨0⟩
18	0 (0) ⟨0⟩ [4.8] {4.8} ⟨0⟩	50	0 (4.7) ⟨0⟩ [0] {0} ⟨0⟩	67	0 (4.9) ⟨0⟩ [0] {0} ⟨0⟩
19	4.6 (0) ⟨0⟩ [0] {0} ⟨0⟩	51	0 (4.8) ⟨0⟩ [0] {0} ⟨0⟩	68	0 (0) ⟨0⟩ [0] ⟨4.8⟩ ⟨0⟩
22	4.6 (0) ⟨0⟩ [0] {0} ⟨0⟩	54	0 (3.8) ⟨0⟩ [0] {0} ⟨0⟩	76	0 (4.6) ⟨0⟩ [0] {0} ⟨0⟩
24	2.1 (0) ⟨0⟩ [0] {0} ⟨0⟩	55	0 (3.7) ⟨0⟩ [0] {0} ⟨0⟩		
25	4.9 (0) ⟨0⟩ [0] {0} ⟨0⟩	58	0 (0) ⟨0⟩ [0] {0} ⟨4.7⟩		

IC801
RESET SIGNAL GENERATOR
BMR0301H

IC800
LCD DRIVER
IC800 μPD7225G

IC802
SYSTEM CONTROLLER
IC802 CXP84332 -168Q

IC803
RDS DECODER
IC805 BU1924F

D804 1SS133T
D807 1SS133T
D806 1SS133T
D815 1SS133T
D816 1SS133T
D808 1SS133T
D809 1SS133T

Q800 2SB1013
Q800, 801 B+ SWITCH
Q801 DTC114EK
Q804 2SB1015
Q804, 805 B+ SWITCH
Q805 DTC114EK
Q806 DTC114EK INVERTER
Q830 2SC2412K DET AMP
Q850 2SB1013
Q850, 851 B+ SWITCH
Q851 DTC114EK

KEY1
KEY2
KEY3
KEY4
KEY5
TRAY-SW
JOG-B
LCD-XRST
TAPE
TUNER
CD
C-SQCK
C-SQSO
C-SCOR
CD-SENS1
SENS2
REMOCON
JOG-A
MD
CD SYNC
VIDEO
RDS-CLK
WP
REG-CON
TRAY-OPEN
TRAY-CLOSE
C-XLAT
REC/PB
C-MUTE
SCK
SDA
VDD
NC
AU MUTE
LINE MUTE
C-CLK
C-DATA
DOLBY
REC-MUTE
NORMAL /HI
A/B
RDS-DATA
TU-CE
TU-COUNT
TU-CLK
TU-DATA
TU-TUNED
T-PLAY (B)
TC-SHUT (B)
TC-SHUT (A)
T-PLAY (A)
T-HALF (A)
TRIG MOTOR H/L
TRIG MOTOR CON (B)
TRIG MOTOR CON (A)
CAP MOTOR H/L
CAP MOTOR CON
REC/PB
REC-BIAS
AMP-MUTE
SPEAK RELAY
C-XRST
HI DUB REC
AMP-STBY
A/B
REG-CON
TU-ON
VIDEO-ON
MD-ON
E.VOL-SCK
E.VOL-DATA
CD-ON
AMP-STBY
AU-MUTE
SP RELAY
AMP MUTE

CASSETTE IN:0
NO CASSETTE:4.8

DSG ON:4.8
DSG OFF:0

REC (DUB/HI-DUB)
T-MODE
(REC/PB) RELAY
LINE-MUTE INH
NR+ ON/OFF
REC-MUTE
NORM/HIGH
A/B-SEL
B1AS+ ON/OFF
REC/PB/PASS
CAP-MOTOR -CON
CAPM+ H/L
A-TRG-MOTOR
B-TRG-MOTOR
TRG+ H/L
A-HALF
A-PLAY
A-SHUT
B-SHUT
B-PLAY

BU+5.6V
FM-ON
REG +12.0V
B/L-CON
D-GND
P-GND

FM-7.5V
CE
DI
CK
DO
TUNED
FM-DET
(AEP, UK, AED)

D-GND
5V
KEY5
KEY1
KEY2
KEY3
KEY4
JOG-B
HI-DUB
12V
TC-LED
CD-LED
TU-LED
MD-LED
JOG-A
VIDEO
CD SYNC
S.S.G
RMC
P-GND
P-GND

CASSETTE HOLDER BACK LIGHT
CASSETTE HOLDER BACK LIGHT

⑦ (Page 32)
③ (Page 32)
④ (Page 32)
⑥ (Page 32)
② (Page 31)
⑤ (Page 32)
Ⓕ (Page 37)

- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  { } : TAPE PLAYBACK (DECK A)
  [ ] : TAPE PLAYBACK (DECK B)
  ⟨⟨ ⟩⟩ : RECORD
  < > : MD/VIDEO

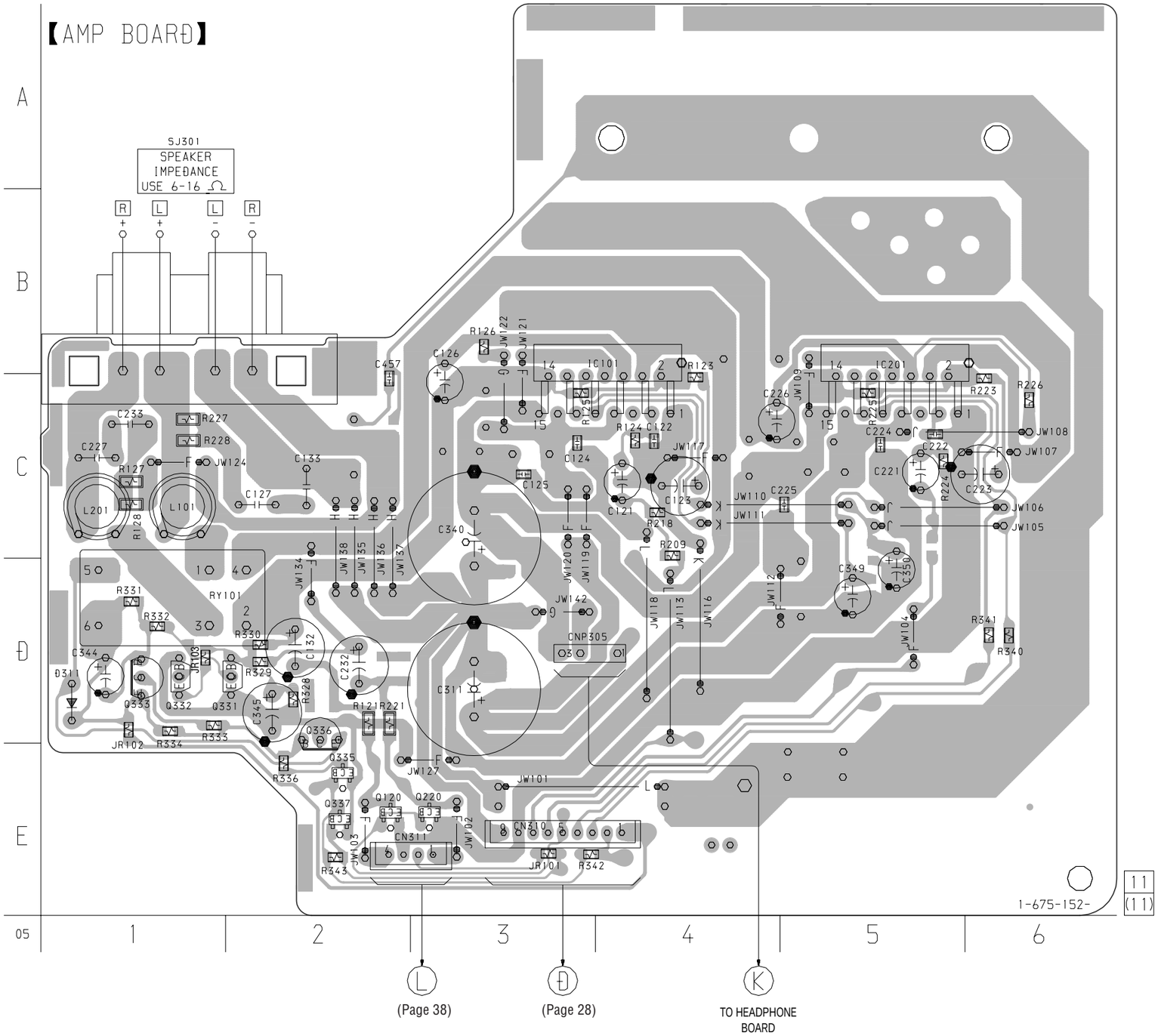
7-15. PRINTED WIRING BOARDS – AMP/HEADPHONE Boards –

• See page 23 for Circuit Boards Location.

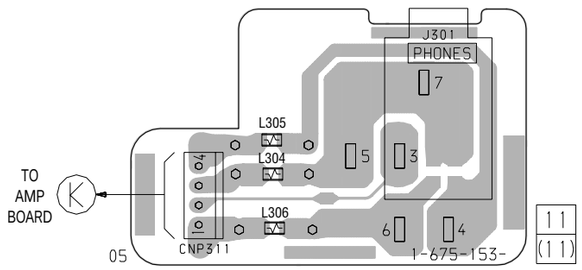
• **Semiconductor Location**

Ref. No.	Location
D311	D-1
IC101	B-4
IC201	B-5
Q120	E-2
Q220	E-3
Q331	D-2
Q332	D-1
Q333	D-1
Q335	E-2
Q336	D-2
Q337	E-2

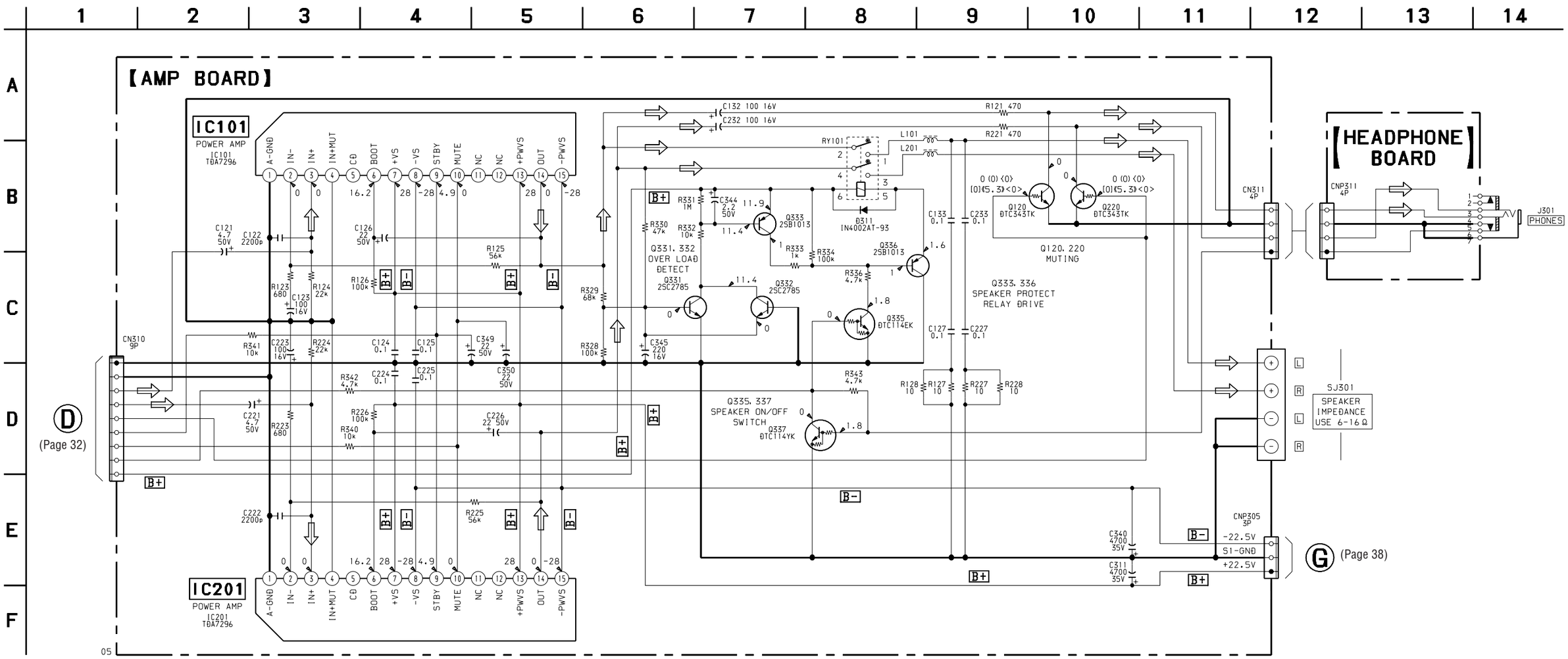
【AMP BOARD】



【HEADPHONE BOARD】



7-16. SCHEMATIC DIAGRAM – POWER AMP Section – • See page 43 for IC Block Diagram.



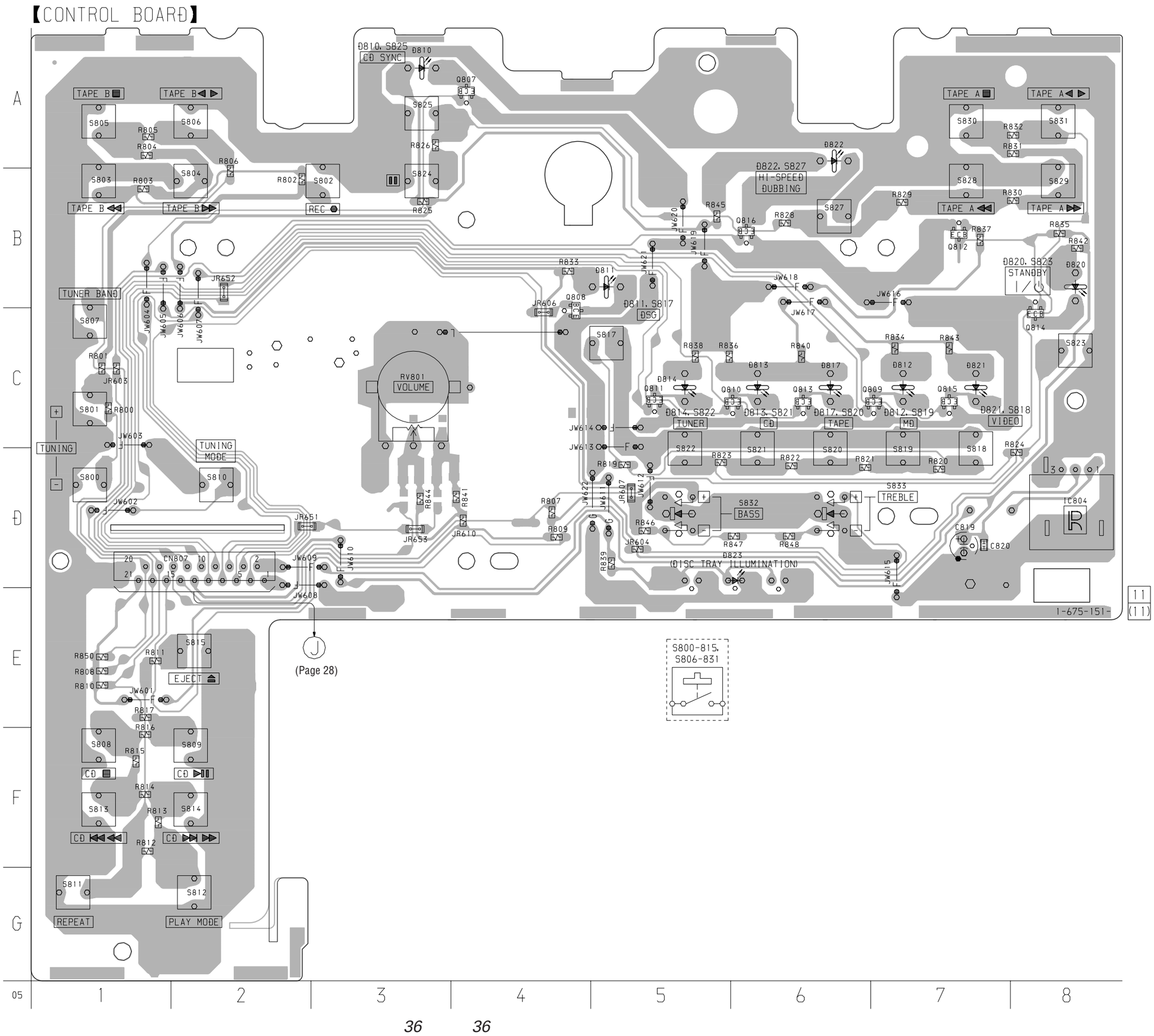
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  { } : TAPE PLAYBACK (DECK A)
  [ ] : TAPE PLAYBACK (DECK B)
  ⟨⟨ ⟩⟩ : RECORD
  < > : MD/VIDEO

7-17. PRINTED WIRING BOARD – CONTROL Board –

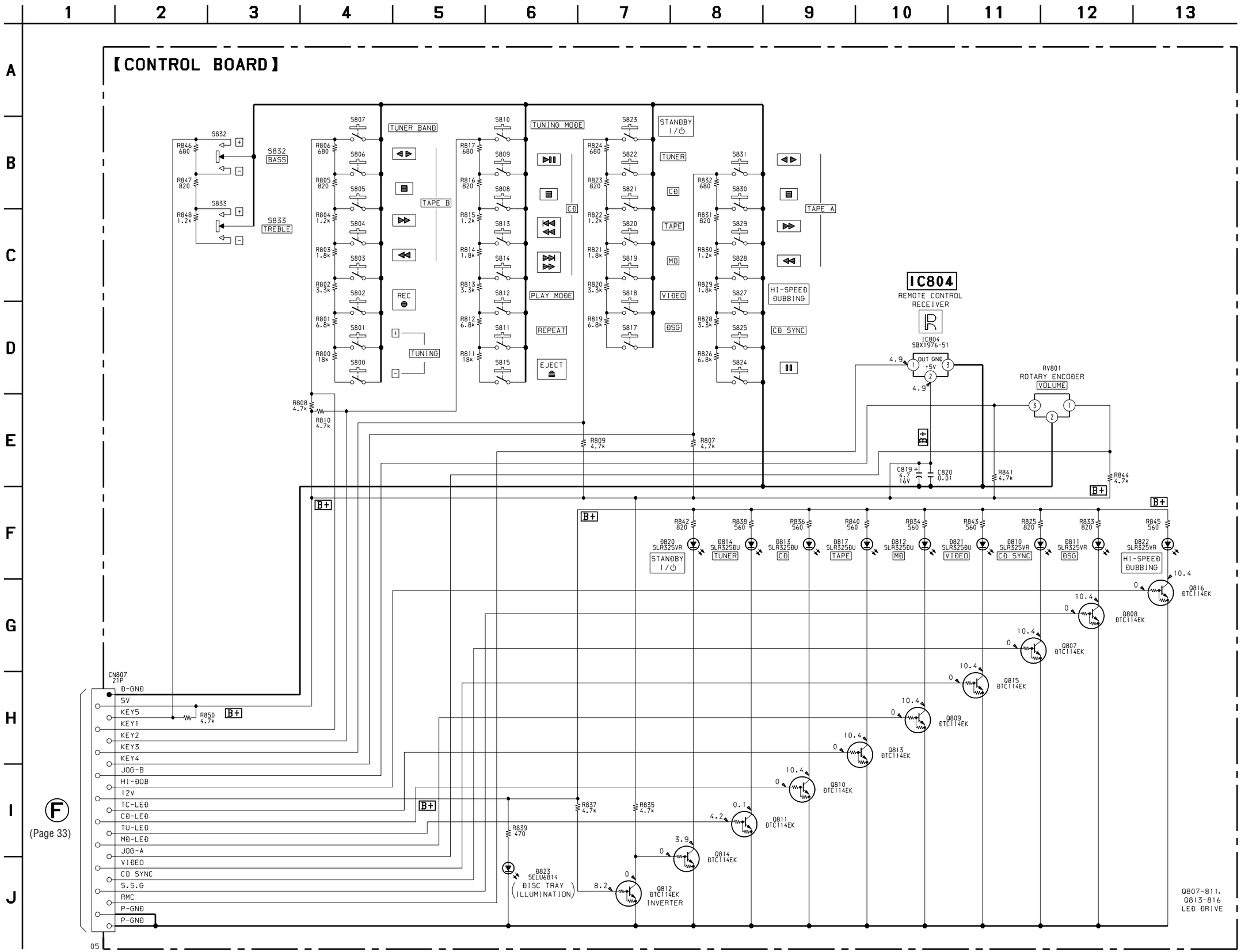
• See page 23 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D810	A-3
D811	B-5
D812	C-7
D813	C-6
D814	C-5
D817	C-6
D820	B-8
D821	C-7
D822	A-6
D823	D-6
IC804	D-8
Q807	A-4
Q808	C-4
Q809	C-7
Q810	C-6
Q811	C-5
Q812	B-7
Q813	C-6
Q814	C-8
Q815	C-7
Q816	B-6



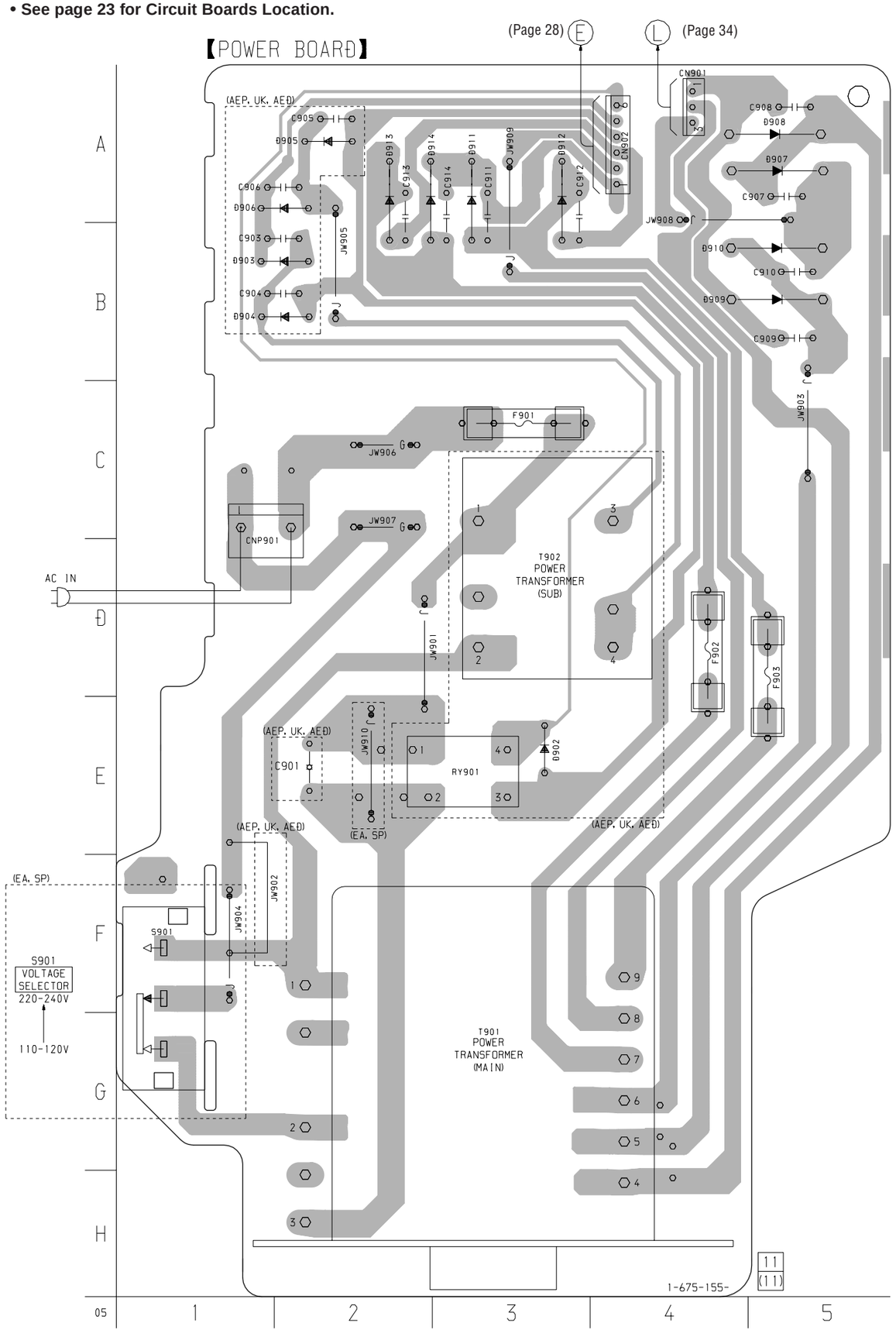
7-18. SCHEMATIC DIAGRAM – KEY CONTROL Section –



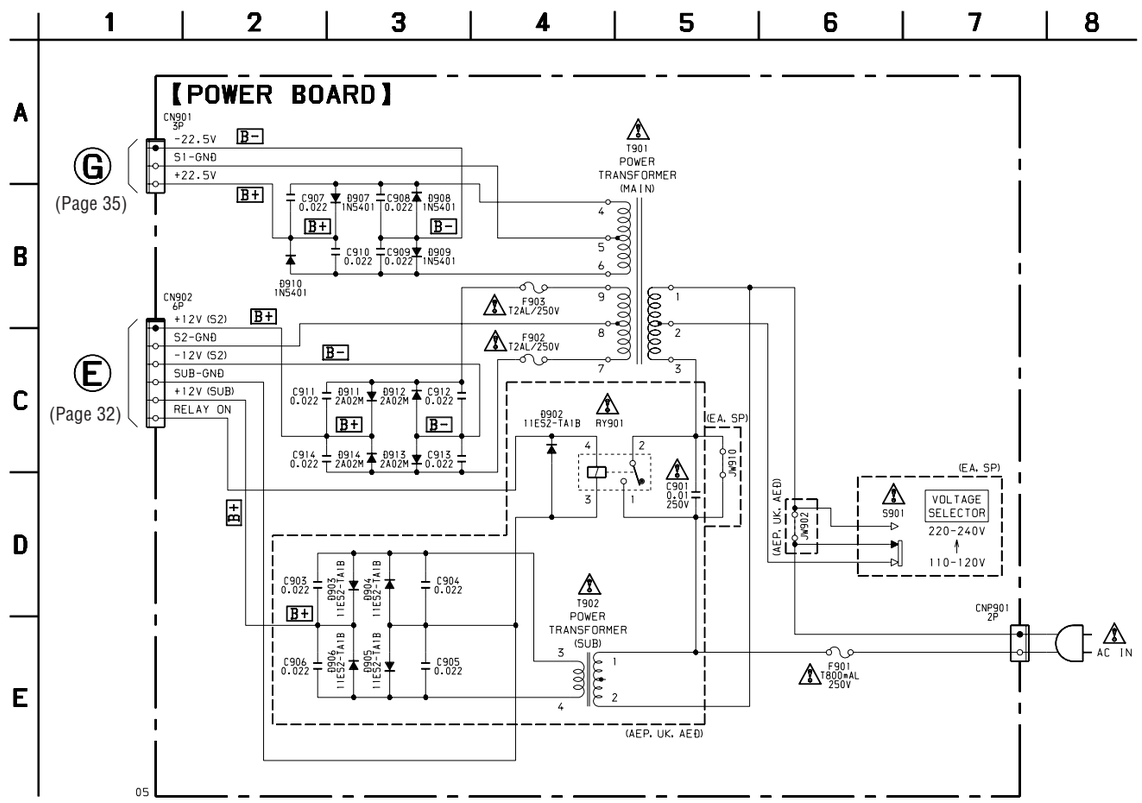
• Voltages are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

7-19. PRINTED WIRING BOARD – POWER Board –

• See page 23 for Circuit Boards Location.



7-20. SCHEMATIC DIAGRAM – POWER SUPPLY Section –



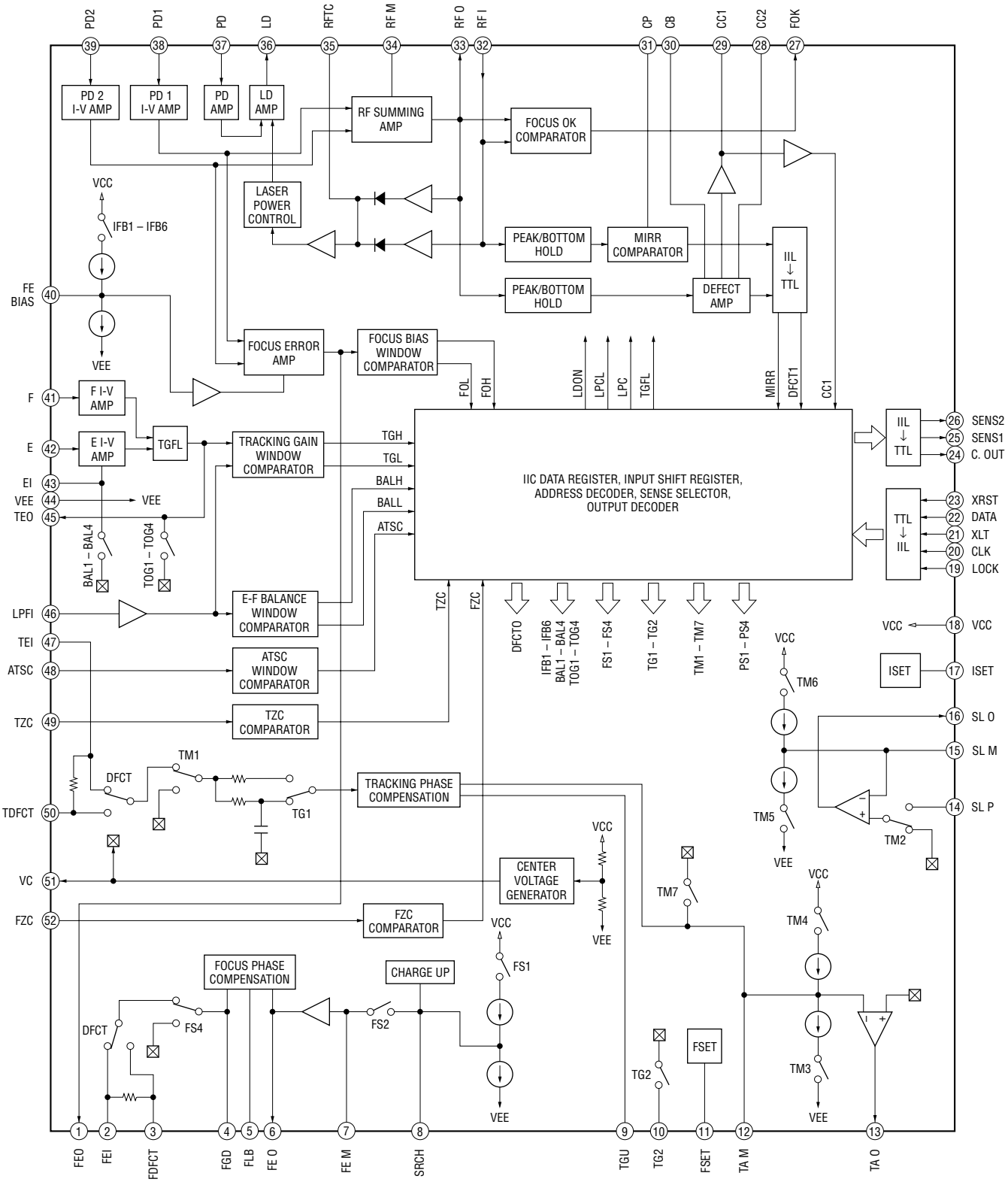
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

• **Semiconductor Location**

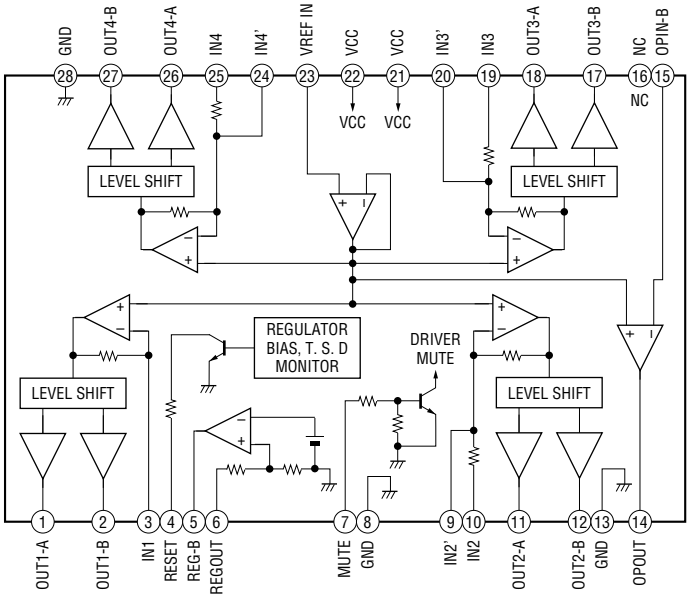
Ref. No.	Location
D902	E-3
D903	B-2
D904	B-2
D905	A-2
D906	A-2
D907	A-5
D908	A-5
D909	B-5
D910	B-5
D911	A-3
D912	A-3
D913	A-2
D914	A-2

• **IC Block Diagrams**
– CD Board –

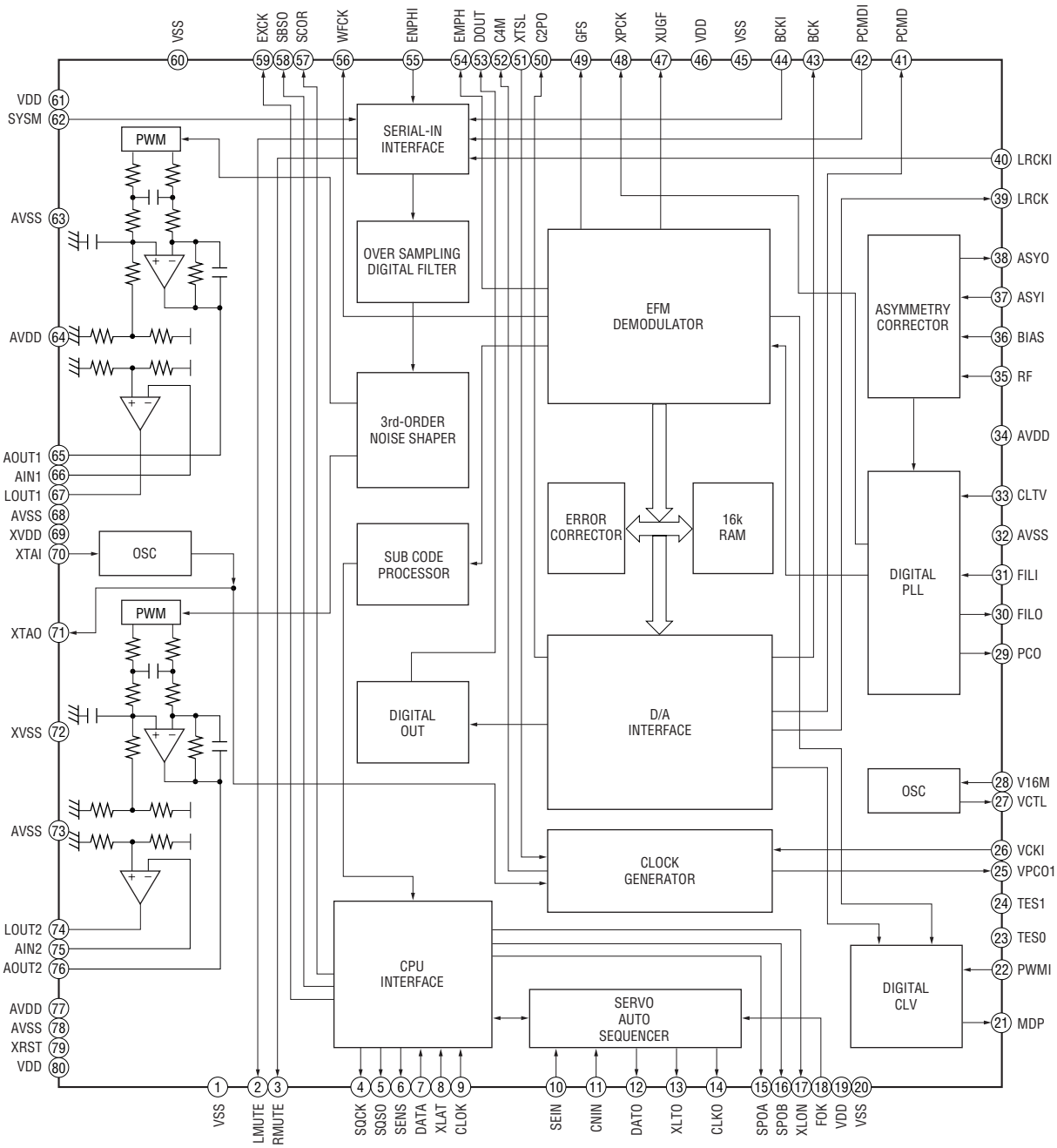
IC701 CXA1992BR



IC702 BA6898FP-E2

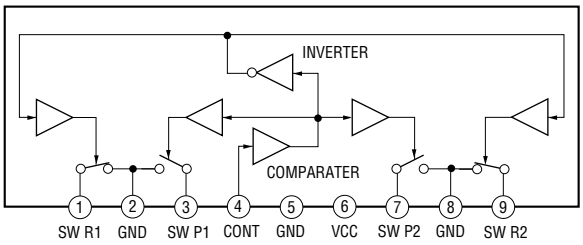


IC703 CXD2589Q



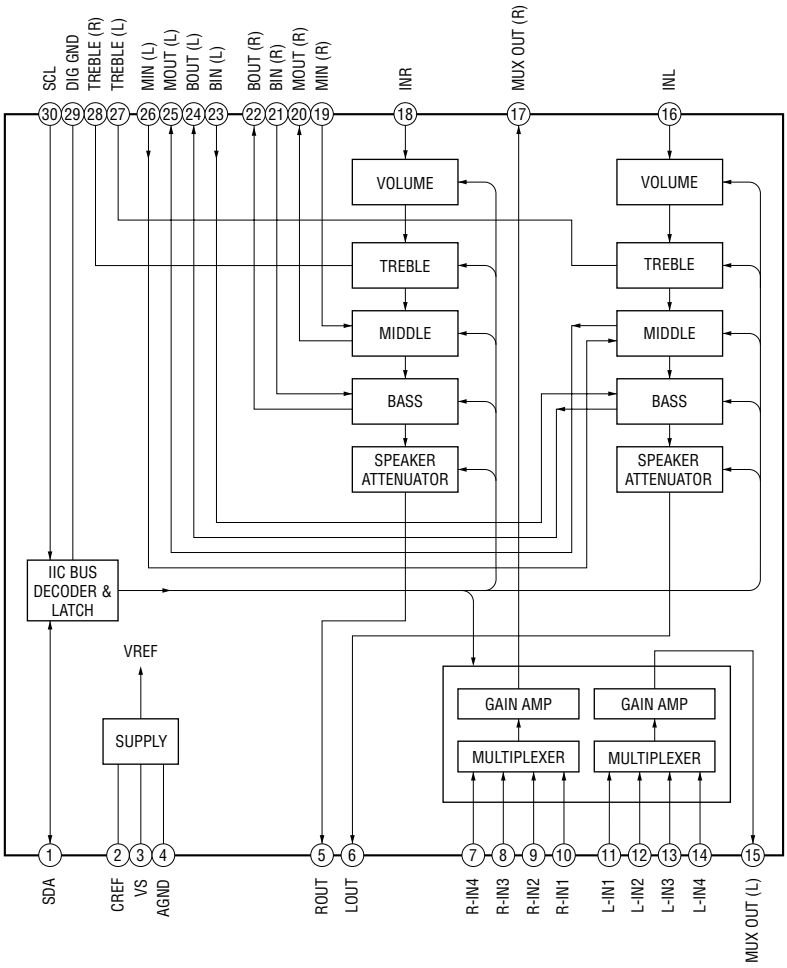
– AUDIO Board –

IC602 µPC1330HA

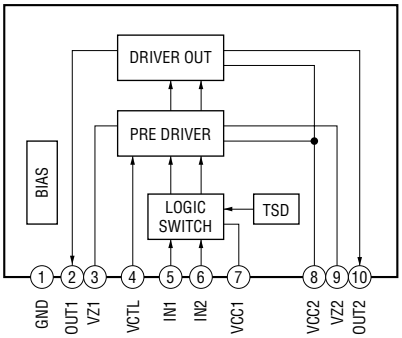


– MAIN Board –

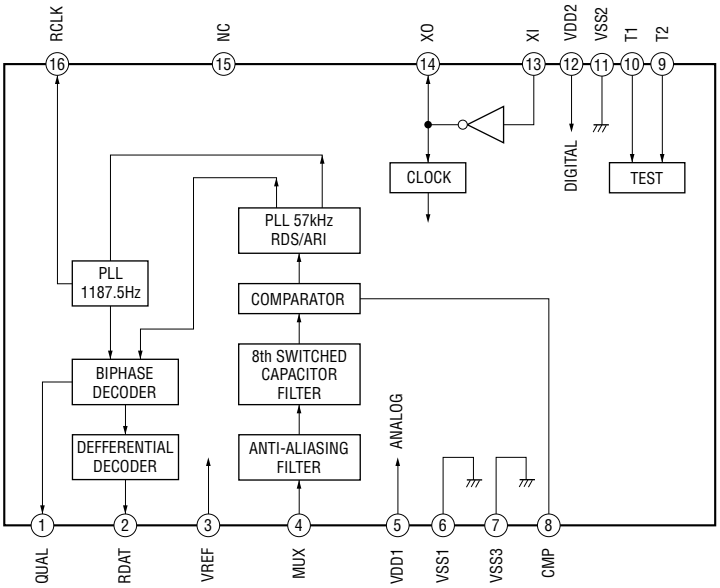
IC301 TDA7439



IC309, 402 KA3082

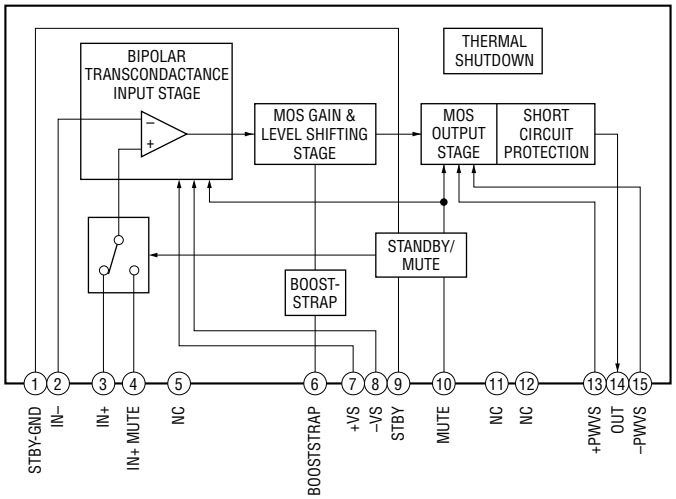


IC803 BU1924F-E2 (AEP, UK, North European models)



– AMP Board –

IC101, 201 TDA7296



7-21. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC802 CXP84332-168Q (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	$\overline{A}$/B	O	Deck-A/B selection signal output to the HA12203NT (IC401) "L": deck-A, "H": deck-B
2	AMP-STBY	O	Standby on/off control signal output to the power amplifier (IC101, 201) "L": standby mode
3	HI DUB REC	O	High speed dubbing control signal output to the HA12203NT (IC401)
4	$\overline{\text{C-XRST}}$	O	Reset signal output to the CXA1992BR (IC701) and CXD2589Q (IC703) "L": reset
5	SPEAK RELAY	O	Speaker protect relay drive signal output terminal "H": relay on
6	AMP-MUTE	O	Muting on/off control signal output to the power amplifier (IC101, 201) "H": muting on
7	REC-BIAS	O	Recording bias on/off selection signal output to the HA12203NT (IC401) "L": bias on, "H": bias off
8	$\overline{\text{REC}}$/PB	O	Recording/playback/pass selection signal output to the HA12203NT (IC401) "L": recording mode, "H": pass, "Hi-z": playback mode
9	CAP MOTOR CON	O	Capstan motor on/off control signal output terminal "H": motor on
10	CAP MOTOR H/L	O	High/normal speed selection signal output of the capstan motor "L": normal speed, "H": high speed
11	TRIG MOTOR CON (A)	O	Deck-A side trigger motor drive signal output to the trigger motor drive (IC402) "H": motor on
12	TRIG MOTOR CON (B)	O	Deck-B side trigger motor drive signal output to the trigger motor drive (IC402) "H": motor on
13	TRIG MOTOR H/L	O	Trigger motor control signal output terminal
14	T-HALF (A)	I	Detection input from the deck-A cassette detect switch (S1003) "L": cassette in, "H": no cassette
15	T-PLAY (A)	I	Detection input from the deck-A play detect switch (S1001) "H": deck-A play
16	TC-SHUT (A)	I	Shut off detection signal input from the deck-A side reel pulse detector (Q1001)
17	TC-SHUT (B)	I	Shut off detection signal input from the deck-B side reel pulse detector (Q1002)
18	T-PLAY (B)	I	Detection input from the deck-B play detect switch (S1002) "H": deck-B play
19	TU-TUNED	I	Tuning detection signal input from the tuner pack "L": tuned
20	TU-DATA	O	PLL serial data output to the tuner pack
21	TU-CLK	O	PLL serial data transfer clock signal output to the tuner pack
22	TU-COUNT	I	PLL serial data input from the tuner pack
23	TU-CE	O	PLL chip enable signal output to the tuner pack
24	RDS-DATA	I	RDS serial data input from the RDS decoder (IC803) (Used for the AEP, UK and North European models only)
25	RDS-ON	O	Power supply on/off control signal output of the tuner pack (+7.5V) and RDS decoder (IC803) (Used for the AEP, UK and North European models only)
26	C/D	O	Command data output to the liquid crystal display driver (IC800)
27	LCD DATA	O	Serial data output to the liquid crystal display driver (IC800)
28	LCD CLK	O	Serial data transfer clock signal output to the liquid crystal display driver (IC800)
29	LCD CE	O	Chip enable signal output to the liquid crystal display driver (IC800)
30	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator (IC801) "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
31	EXTAL1	I	Main system clock input terminal (4.19 MHz)
32	XTAL1	O	Main system clock output terminal (4.19 MHz)
33	VSS	—	Ground terminal
34	TX	O	Sub system clock output terminal (32.768 kHz)
35	TEX	I	Sub system clock input terminal (32.768 kHz)
36	AVSS	—	Ground terminal (for A/D converter)

Pin No.	Pin Name	I/O	Description
37	AVREF	I	Reference voltage (+5V) input terminal (for A/D converter)
38	SIMUKE	I	Destination setting terminal (A/D input)
39	T-MODE	I	Detection input from the deck-B half detect switch (S1006)
40	KEY1	I	Key input terminal (A/D input) S800 to S807 (TUNING –/+, REC ●, TAPE B ◀◀/▶▶/■/◀▶, TUNER BAND keys input)
41	KEY2	I	Key input terminal (A/D input) S808 to S815 (CD ■/▶II, TUNING MODE, REPEAT, PLAY MODE,CD I◀◀ ◀◀/▶▶I ▶▶, EJECT ≜ keys input)
42	KEY3	I	Key input terminal (A/D input) S817 to S823 (DSG, VIDEO, MD, TAPE, CD, TUNER, STANDBY I/⏻ keys input)
43	KEY4	I	Key input terminal (A/D input) S824 to S831 (II, CD SYNC, HI-SPEED DUBBING, TAPE A ◀◀/▶▶/■/◀▶ keys input)
44	KEY5	I	Key input terminal (A/D input) S832 and S833 (BASS, TREBLE keys input)
45	TRAY-SW	I	Disc tray position detect switch (S901, S902) input terminal (A/D input) "L": close position, "M": open position, "H": moving
46	JOG-B	I	Jog dial pulse input from the rotary encoder (RV801 VOLUME) (B phase input)
47	$\overline{\text{LCD-XRST}}$	O	Reset signal output to the liquid crystal display driver (IC800) "L": reset
48	TAPE	O	Power supply on/off control signal output of the cassette holder back light LED drive signal output of the TAPE indicator (D817) "H": back light on (LED on)
49	TUNER	O	Power supply on/off control signal output of the tuner pack (+9.5V) LED drive signal output of the TUNER indicator (D814) "H": tuner power on (LED on)
50	CD	O	Power supply on/off control signal output of the CD block (+5V) LED drive signal output of the CD indicator (D813) "H": CD power on (LED on)
51	C-SQCK	O	Subcode Q data reading clock signal output to the CXD2589Q (IC703)
52	C-SQSO	I	Subcode Q data input from the CXD2589Q (IC703)
53	DSG	O	LED drive signal output of the DSG (Dynamic Sound Generator) indicator (D811) "H": LED on
54	CD-SENS1	I	Internal status detection monitor input from the CXD2589Q (IC703) (for FZC, DFCT1, TZC, etc.)
55	SENS2	I	Internal status detection monitor input from the CXA1992BR (IC701) (for MIRR, DFCT2, etc.)
56	REMOCON	I	Sircs remote control signal input from the remote control receiver (IC804)
57	JOG-A	I	Jog dial pulse input from the rotary encoder (RV801 VOLUME) (A phase input)
58	MD	O	MD function control signal output terminal LED drive signal output of the MD indicator (D812) "H": MD (LED on) ("L" output when other functions)
59	CD SYNC	O	LED drive signal output of the CD SYNC indicator (D810) "H": LED on
60	VIDEO	O	VIDEO function control signal output terminal LED drive signal output of the VIDEO indicator (D821) "H": VIDEO (LED on) ("L" output when other functions)
61	RDS-CLK	I	Serial data reading clock signal input from the RDS decoder (IC803) (Used for the AEP, UK and North European models only)
62	C-SCOR	I	Subcode sync (S0+S1) detection signal input from the CXD2589Q (IC703)
63	WP	I	Wake up control signal input terminal
64	REG-CON	O	Main system power supply on/off control signal output terminal "H": power on
65	TRAY-OPEN	O	Motor drive signal output to the disc tray open/close motor drive (IC309) "H" active *1
66	TRAY-CLOSE	O	Motor drive signal output to the disc tray open/close motor drive (IC309) "H" active *1

*1 Disc tray open/close motor (M901) control

Mode / Terminal	Stop	Table In	Table Out	Brake
TRAY-OPEN (pin ⑮)	"L"	"L"	"H"	"H"
TRAY-CLOSE (pin ⑯)	"L"	"H"	"L"	"H"

Pin No.	Pin Name	I/O	Description
67	C-XLAT	O	Serial data latch pulse output to the CXD2589Q (IC703)
68	REC/$\overline{PB}$	O	Recording/playback selection signal output to the REC/PB switching (IC602) “L”: playback mode, “H”: recording mode
69	C-MUTE	O	Muting on/off control signal output to the CXD2589Q (IC703)
70	SCK	O	Serial data transfer clock signal output to the TDA7439 (IC301)
71	SDA	O	Serial data output to the TDA7439 (IC301)
72	VDD	—	Power supply terminal (+5V)
73	NC	—	Connected to power supply (+5V)
74	AU MUTE	O	Muting on/off control signal output terminal “H”: muting on
75	LINE MUTE	O	Line muting on/off selection signal output to the HA12203NT (IC401) “L”: muting off, “H”: muting on
76	C-CLK	O	Serial data transfer clock signal output to the CXD2589Q (IC703)
77	C-DATA	O	Serial data output to the CXD2589Q (IC703)
78	DOLBY	O	Dolby NR on/off selection signal output to the HA12203NT (IC401) “L”: dolby off, “H”: dolby on
79	REC-MUTE	O	Recording muting on/off selection signal output to the HA12203NT (IC401) “L”: muting off, “H”: muting on
80	$\overline{NORMAL}$/HI	O	Normal/high speed selection signal output to the HA12203NT (IC401) LED drive signal output of the HI-SPEED DUBBING indicator (D822) “L”: normal speed, “H”: high speed (LED on)

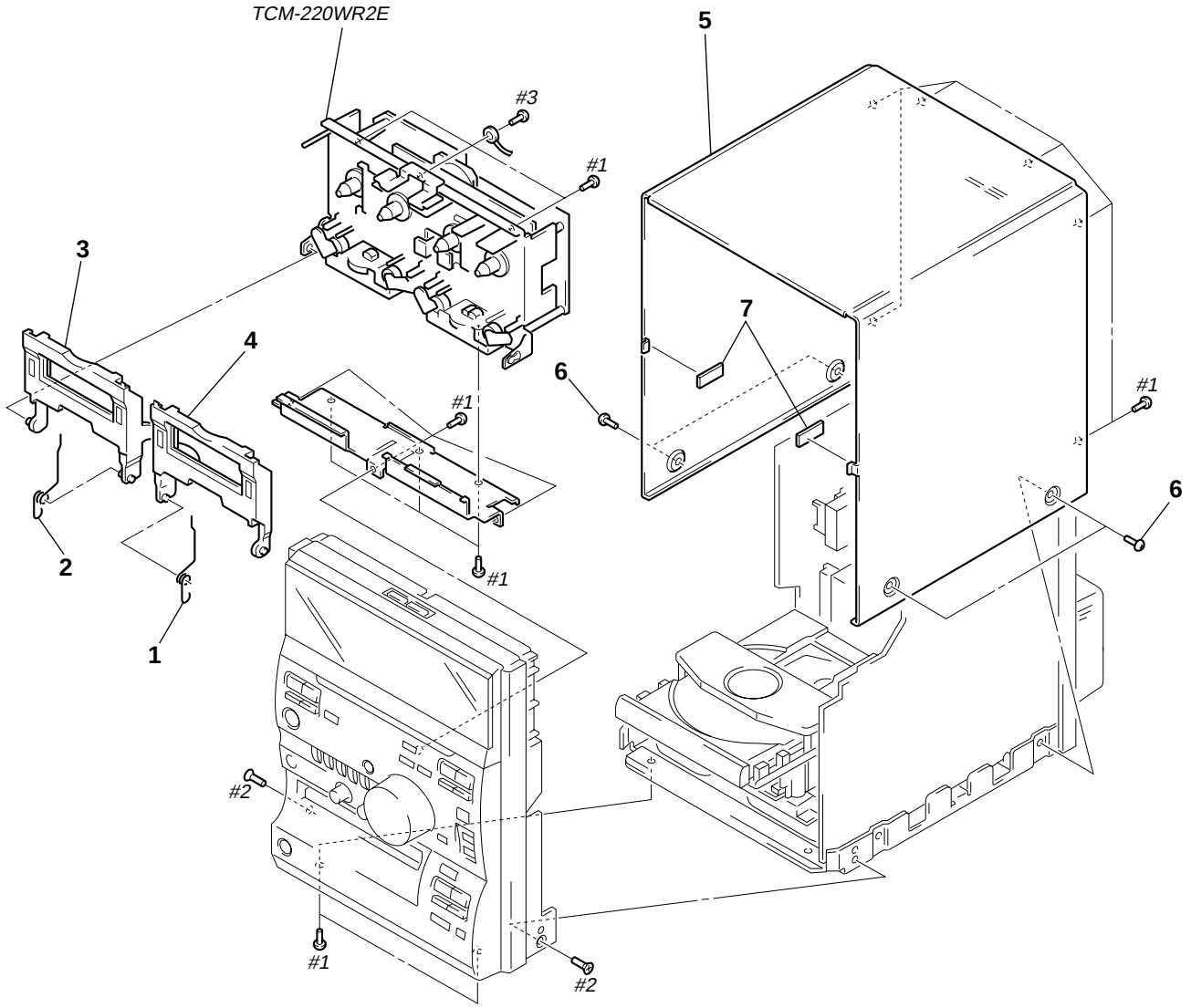
SECTION 8
EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Abbreviation
  AED : North European model
  EA : Saudi Arabia model
  SP : Singapore model

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of the electrical parts list.

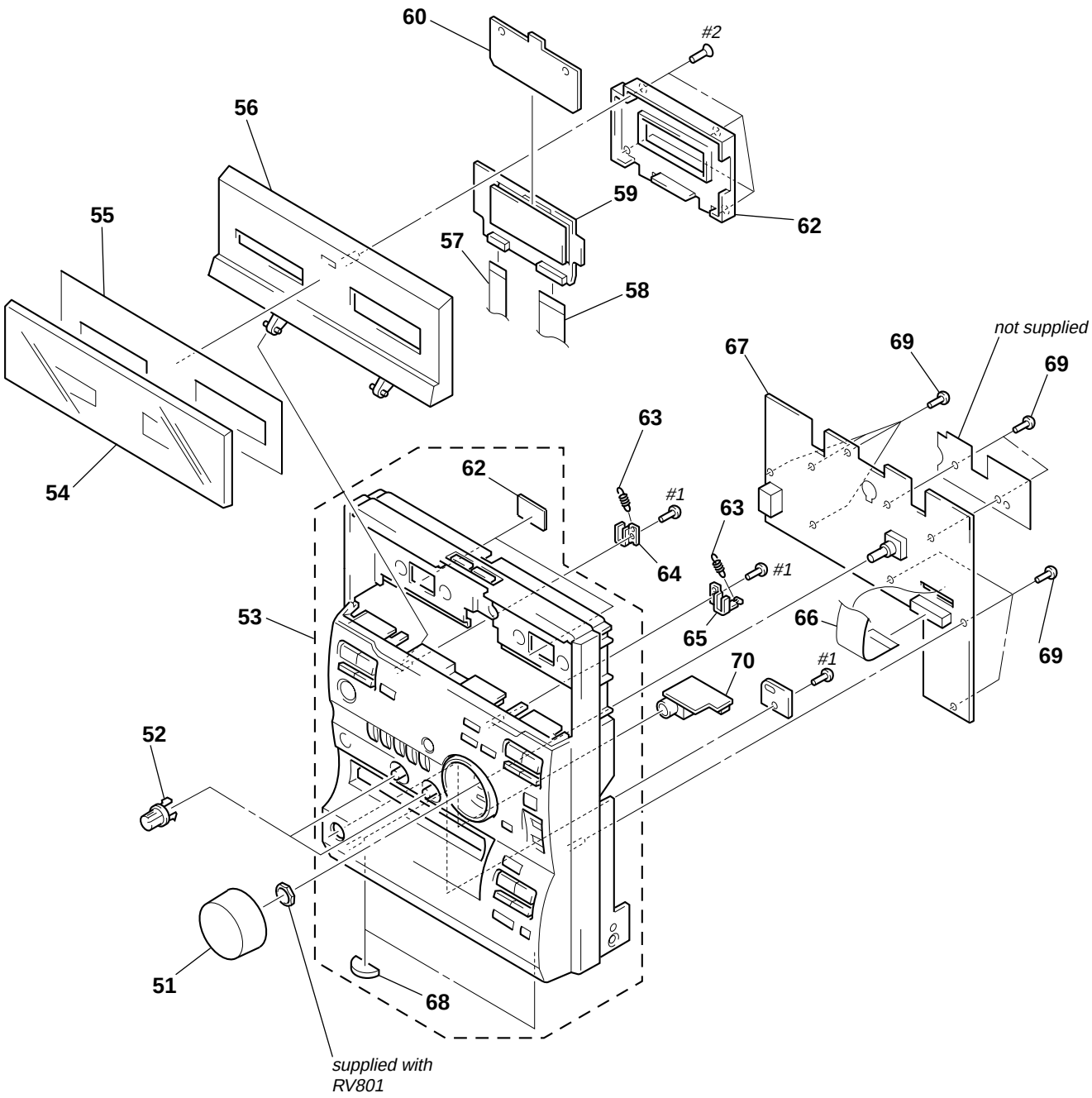
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

(1) GENERAL SECTION



Ref. No.	Part No.	Description	Remark
1	4-222-365-01	SPRING (CASSETTE B)	
2	4-222-364-01	SPRING (CASSETTE A)	
3	X-4951-962-1	HOLDER (A) SUB ASSY, CASSETTE	
4	X-4951-963-1	HOLDER (B) SUB ASSY, CASSETTE	
5	4-222-370-01	COVER (UPPER)	
6	4-221-580-01	SCREW, CASE	
7	3-831-441-99	SPACER	

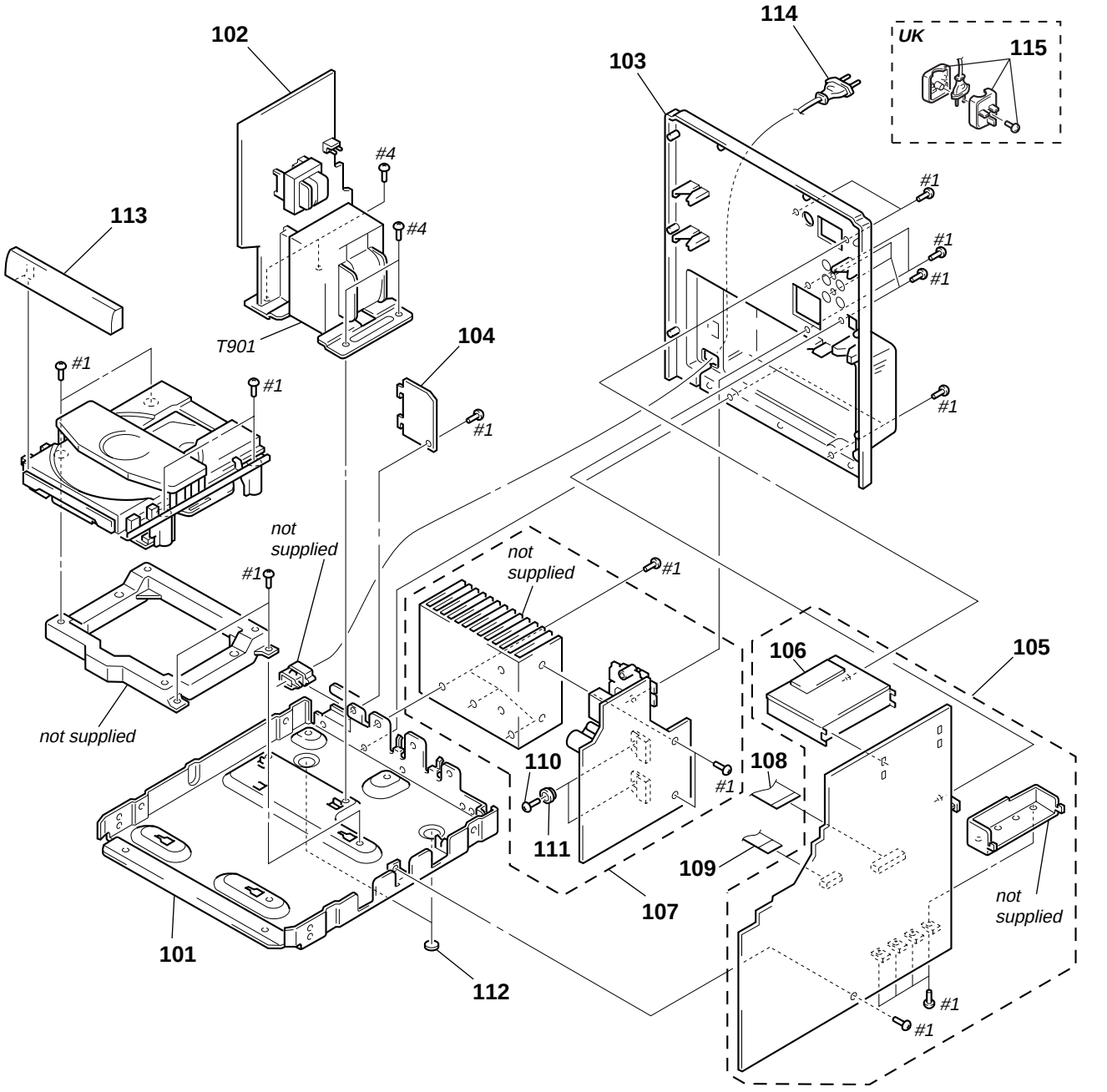
(2) FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-4952-108-1	KNOB ASSY	
52	4-222-401-01	BUTTON (BASS)	
53	X-4951-956-1	PANEL SUB ASSY, FRONT (AEP, UK, AED)	
53	X-4952-135-1	PANEL SUB ASSY, FRONT (EA, SP)	
54	4-222-362-01	WINDOW (CASSETTE)	
55	4-222-368-01	SHEET (CASSETTE)	
56	4-222-363-01	LID, CASSETTE	
57	1-791-437-11	WIRE (FLAT TYPE) (17 CORE)	
58	1-791-438-11	WIRE (FLAT TYPE) (21 CORE) (180mm)	
59	1-675-150-11	LCD BOARD	
60	4-217-319-01	PLATE, LCD LIGHT	

Ref. No.	Part No.	Description	Remark
61	4-222-376-01	BRACKET (LCD)	
62	1-418-482-11	ILLUMINATION BLOCK, LED	
63	4-222-388-01	SPRING (CASSETTE LID)	
64	4-222-394-01	BRACKET (CASSETTE LID A)	
65	4-222-395-01	BRACKET (CASSETTE LID B)	
66	1-791-435-11	WIRE (FLAT TYPE) (21 CORE) (105mm)	
67	A-4426-637-A	CONTROL BOARD, COMPLETE	
68	4-218-204-01	FOOT (FRONT)	
69	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING	
70	1-675-153-11	HEADPHONE BOARD	

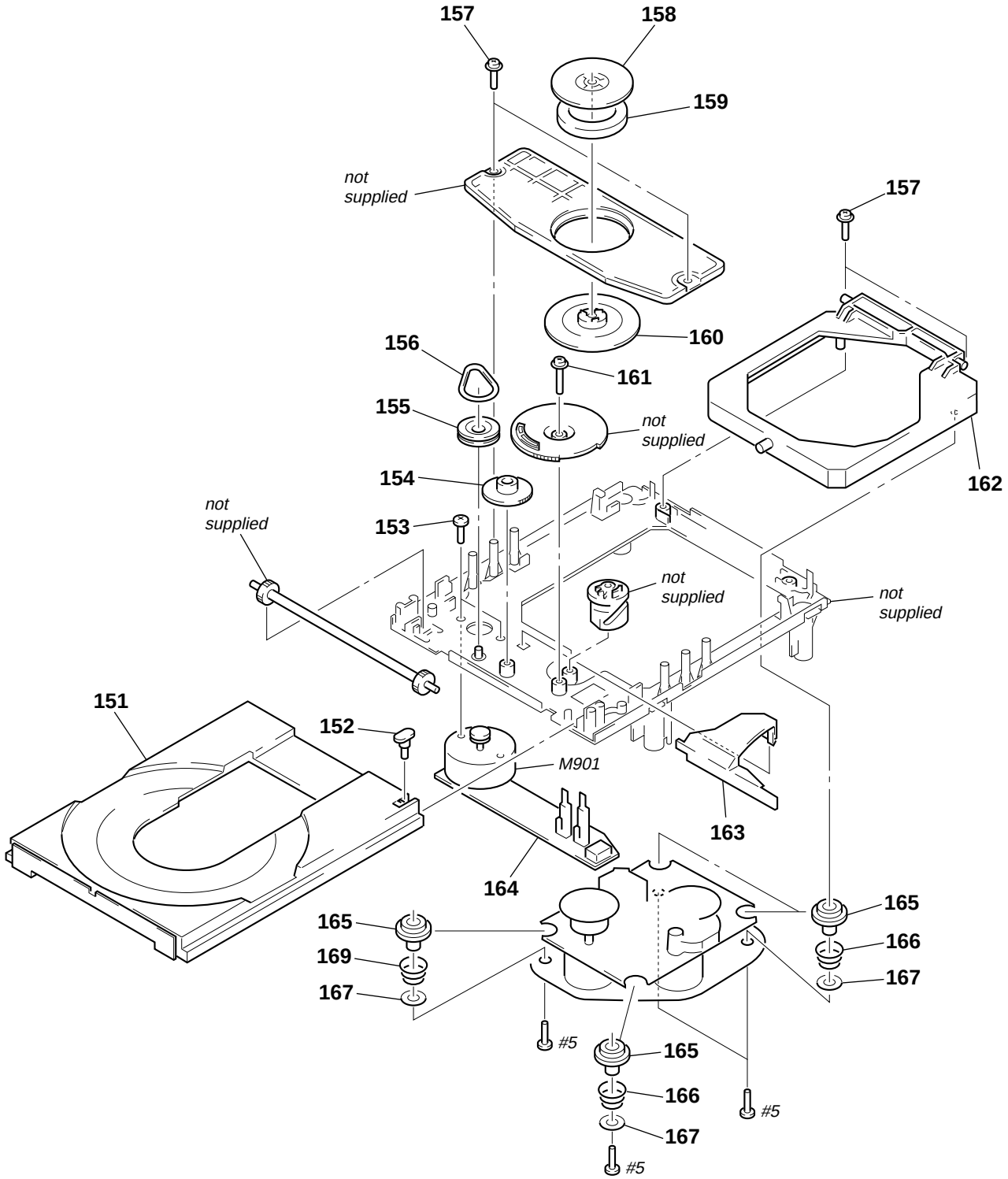
(3) CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
101	4-222-377-01	CHASSIS (LOWER)	
102	1-675-155-11	POWER BOARD	
103	4-222-361-01	PANEL, BACK (AEP, UK, AED)	
103	4-222-361-21	PANEL, BACK (EA, SP)	
104	1-675-154-11	RETAINER BOARD	
105	A-4426-641-A	MAIN BOARD, COMPLETE (AEP, UK, AED)	
105	A-4426-844-A	MAIN BOARD, COMPLETE (EA, SP)	
106	A-4411-460-A	TUNER PACK (AEP, UK, AED)	
106	A-4426-617-A	TUNER PACK (EA, SP)	
107	A-4426-642-A	AMP BOARD, COMPLETE (AEP, UK, AED)	
107	A-4426-842-A	AMP BOARD, COMPLETE (EA, SP)	
108	1-791-436-11	WIRE (FLAT TYPE) (21 CORE)	
109	1-791-434-11	WIRE (FLAT TYPE) (11 CORE)	
110	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING	
* 111	4-217-354-01	BUSHING, INSULATING	
112	4-217-355-01	FOOT	
113	4-217-332-01	LID, CD	
⚠114	1-696-169-11	CORD, POWER	
⚠115	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
⚠T901	1-435-100-11	TRANSFORMER, POWER (AEP, UK, AED)	
⚠T901	1-435-101-11	TRANSFORMER, POWER (EA, SP)	

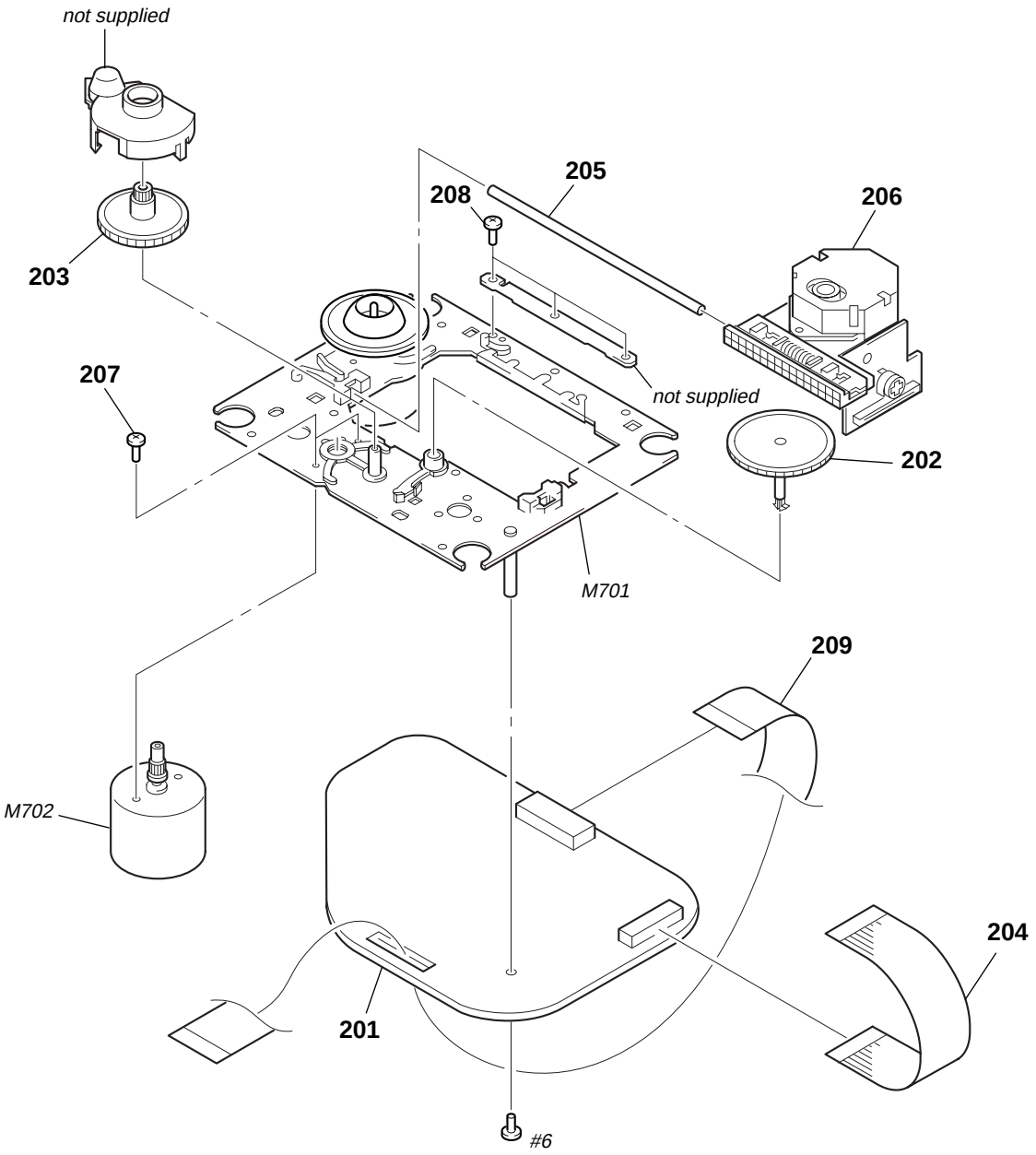
(4) CD MECHANISM DECK SECTION-1 (KSL-2130CCP/K1N)



Ref. No.	Part No.	Description	Remark
* 151	2-646-290-01	TRAY (2130)	
152	2-625-541-02	DAMPER (S)	
153	2-625-279-01	SCREW (B 2.6X2.5), +	
154	2-625-274-02	GEAR, MIDWAY	
155	2-625-276-02	PULLEY, LOADING	
156	3-653-387-00	BELT, LM	
157	2-626-294-01	SCREW (+PTPWH) (2.6X7)	
* 158	2-625-284-05	PLATE, CHUCKING	
159	1-452-493-21	MAGNET	
160	2-625-286-03	PULLEY, CHUCKING	

Ref. No.	Part No.	Description	Remark
161	3-319-501-51	SCREW (+PTPWH) (2.6X16)	
* 162	2-646-288-01	CHASSIS (2130), SUB	
* 164	1-640-523-11	LOADING BOARD	
* 165	2-627-234-01	INSULATOR	
166	2-627-235-01	SPRING (REAR), COIL	
167	2-646-289-01	WASHER (2130)	
168	2-641-386-01	SCREW (2X5), TAPPING (S)	
169	2-627-236-01	SPRING (FRONT), COIL	
M901	X-2625-117-1	MOTOR ASSY, LOADING	

(5) CD MECHANISM DECK SECTION-2 (KSL-2130CCP/K1N)

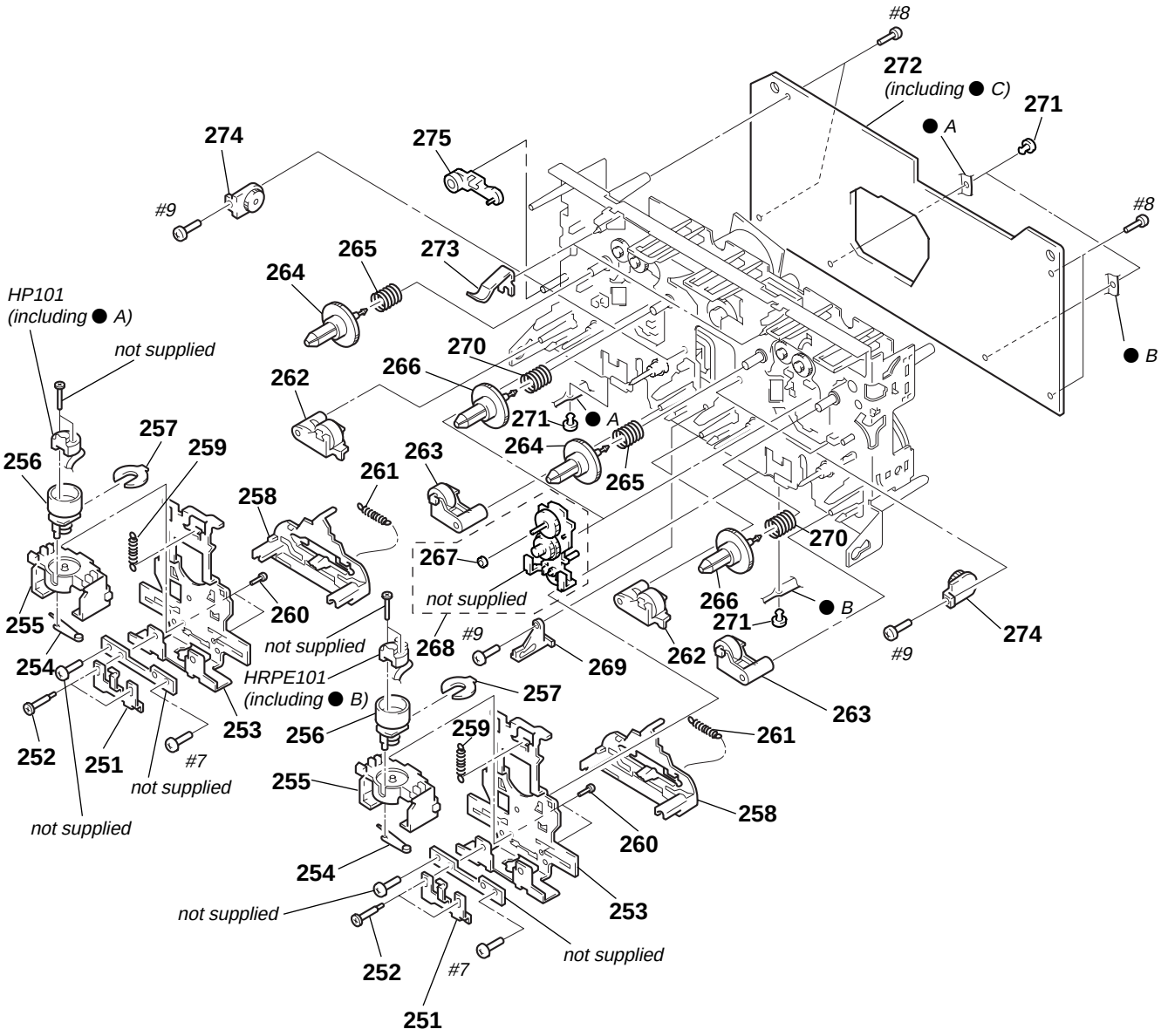


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
201	A-4405-850-A	CD BOARD, COMPLETE	
202	2-625-188-02	GEAR (A)	
203	2-627-003-02	GEAR (B) (RP)	
204	1-773-126-11	WIRE (FLAT TYPE) (19 CORE)	
205	2-626-908-01	SHAFT, SLED	
⚠206	8-820-070-02	OPTICAL PICK-UP KSM-213CCP/K1N	

Ref. No.	Part No.	Description	Remark
207	3-713-786-51	SCREW +P 2X3	
208	2-641-386-01	SCREW (2X5), TAPPING (S)	
209	1-773-113-11	WIRE (FLAT TYPE) (16 CORE)	
M701	X-2646-381-1	MOTOR CHASSIS ASSY (MB) (SPINDLE)	
M702	X-2625-769-1	MOTOR GEAR ASSY (MB) (RP) (SLED)	

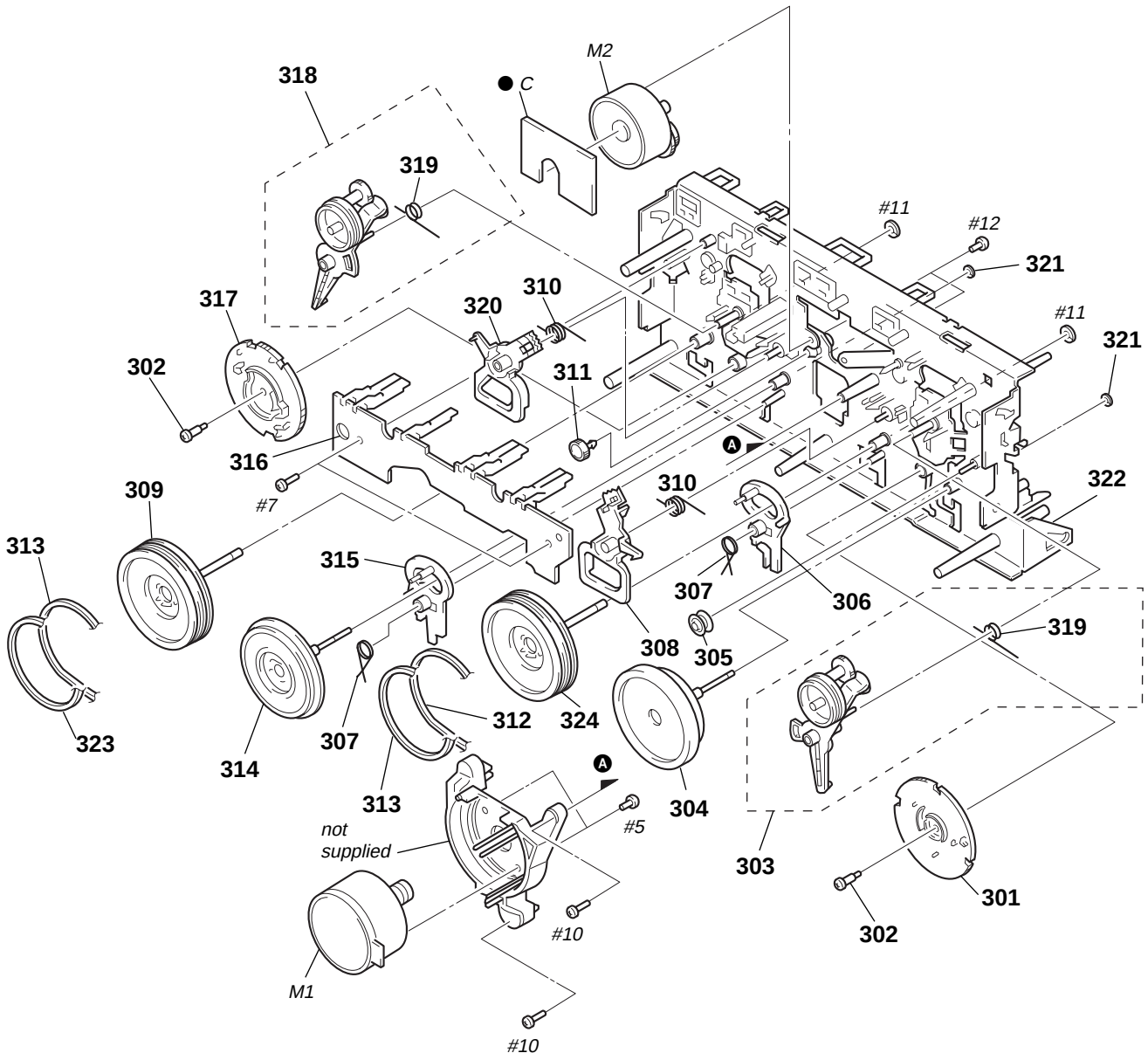
(6) TAPE MECHANISM DECK SECTION-1 (TCM-220WR2E)



Ref. No.	Part No.	Description	Remark
251	3-908-560-01	SPRING, AZIMUTH ADJUSTMENT	
252	3-919-684-01	SCREW, AZIMUTH ADJUSTMENT	
253	X-3373-113-1	SLIDER (HEAD) ASSY	
254	3-009-956-11	SPRING, HEAD TOGGLE	
255	3-908-558-02	FITTING BLOCK, HEAD	
256	3-908-557-02	ROTARY BLOCK, HEAD	
* 257	3-908-559-01	STOPPER, AZIMUTH	
258	3-908-555-01	SLIDER (REV SLIDER)	
259	3-917-143-11	SPRING, TENSION	
260	3-388-848-01	SCREW (P2X6) (B TIGHT)	
261	3-939-371-01	SPRING (1), TENSION	
262	X-3369-909-1	PINCH LEVER (REV) ASSY	
263	X-3369-908-1	PINCH LEVER (FWD) ASSY	
264	3-908-613-01	GEAR (S), REEL	

Ref. No.	Part No.	Description	Remark
265	3-917-141-01	SPRING, COMPRESSION	
266	X-3371-305-1	REEL (T) ASSY	
267	3-669-465-01	WASHER (1.5), STOPPER	
268	X-3370-173-1	TU ASSY	
* 269	4-980-439-01	FULCRUM, HOLDER	
270	3-917-142-01	SPRING, COMPRESSION	
271	3-939-862-01	CLIP	
* 272	A-2007-435-A	AUDIO BOARD, COMPLETE	
273	3-930-972-01	DETENT, HALF	
274	3-354-963-01	DAMPER	
275	3-938-863-01	STOPPER	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK) (DECK A)	
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE) (DECK B)	

(7) TAPE MECHANISM DECK SECTION-2 (TCM-220WR2E)



Ref. No.	Part No.	Description	Remark
301	3-908-597-01	CAM (A)	
302	3-908-608-11	SCREW, STEP	
303	X-3372-930-1	ARM (A) ASSY, FR	
304	X-3370-882-1	FLYWHEEL (AR) ASSY	
305	3-928-047-01	PULLEY, TENSION	
306	3-908-599-01	LEVER (REV-A)	
307	3-908-601-01	SPRING (REV LEVER), TORSION	
308	3-908-603-01	LEVER (TRIGGER A)	
309	X-3367-593-1	FLYWHEEL (BF) ASSY	
310	3-908-605-01	SPRING (TRIGGER), TORSION	
311	3-908-609-01	GEAR, TRIGGER	
312	3-913-845-11	BELT (A)	
313	3-913-846-11	BELT (FR)	
314	X-3370-171-1	FLYWHEEL (BR) ASSY	
315	3-908-600-01	LEVER (REV-B)	
* 316	1-650-669-11	LEAF SWITCH BOARD	
317	3-908-598-01	CAM (B)	
318	X-3372-931-1	ARM (B) ASSY, FR	
319	3-911-114-01	SPRING (FR), TORSION	
320	3-908-604-01	LEVER (TRIGGER B)	
321	3-911-115-01	WASHER, STOPPER	
322	X-3371-441-1	CHASSIS ASSY, MECHANICAL	
323	3-917-176-11	BELT (B)	
324	X-3370-172-1	FLYWHEEL (AF) ASSY	
M1	X-3371-223-1	MOTOR ASSY, CAPSTAN	
M2	A-2004-410-A	MOTOR ASSY, DC (TRIGGER)	

AMP

SECTION 9
ELECTRICAL PARTS LIST

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  AED : North European model
  EA : Saudi Arabia model
  SP : Singapore model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-4426-642-A	AMP BOARD, COMPLETE (AEP, UK, AED)			
	A-4426-842-A	AMP BOARD, COMPLETE (EA, SP)			
		**********			
*	4-217-354-01	BUSHING, INSULATING			
	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING			
		< CAPACITOR >			
C121	1-126-963-11	ELECT	4.7uF	20%	50V
C122	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C123	1-104-665-11	ELECT	100uF	20%	16V
C124	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C125	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C126	1-126-965-11	ELECT	22uF	20%	50V
C127	1-130-495-00	MYLAR	0.1uF	5%	50V
C132	1-104-665-11	ELECT	100uF	20%	16V
C133	1-130-495-00	MYLAR	0.1uF	5%	50V
C221	1-126-963-11	ELECT	4.7uF	20%	50V
C222	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C223	1-104-665-11	ELECT	100uF	20%	16V
C224	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C225	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C226	1-126-965-11	ELECT	22uF	20%	50V
C227	1-130-495-00	MYLAR	0.1uF	5%	50V
C232	1-104-665-11	ELECT	100uF	20%	16V
C233	1-130-495-00	MYLAR	0.1uF	5%	50V
C311	1-126-955-11	ELECT	4700uF	20%	35V
C340	1-126-955-11	ELECT	4700uF	20%	35V
C344	1-126-961-11	ELECT	2.2uF	20%	50V
C345	1-104-666-11	ELECT	220uF	20%	16V
C349	1-126-965-11	ELECT	22uF	20%	50V
C350	1-126-965-11	ELECT	22uF	20%	50V
		< CONNECTOR >			
* CN310	1-568-936-11	PIN, CONNECTOR 9P			
CN311	1-506-469-11	PIN, CONNECTOR 4P			
		< DIODE >			
D311	8-719-200-02	DIODE IN4002AT-93			
		< IC >			
IC101	8-759-584-39	IC TDA7296			
IC201	8-759-584-39	IC TDA7296			

Ref. No.	Part No.	Description			Remark
		< SHORT >			
JR101	1-216-295-00	SHORT	0		
JR102	1-216-295-00	SHORT	0		
		< COIL >			
L101	1-420-872-00	COIL, AIR-CORE			
L201	1-420-872-00	COIL, AIR-CORE			
		< TRANSISTOR >			
Q120	8-729-920-31	TRANSISTOR	DTC343TK-T-146		
Q220	8-729-920-31	TRANSISTOR	DTC343TK-T-146		
Q331	8-729-230-91	TRANSISTOR	2SC2785-HFE		
Q332	8-729-230-91	TRANSISTOR	2SC2785-HFE		
Q333	8-729-801-84	TRANSISTOR	2SB1013-TP-34		
Q335	8-729-900-53	TRANSISTOR	DTC114EKA-T146		
Q336	8-729-801-84	TRANSISTOR	2SB1013-TP-34		
Q337	8-729-027-46	TRANSISTOR	DTC114YK-T146		
		< RESISTOR >			
R121	1-216-190-00	RES, CHIP	470	5%	1/8W
R123	1-216-045-00	METAL CHIP	680	5%	1/10W
R124	1-216-081-00	METAL CHIP	22K	5%	1/10W
R125	1-216-091-00	METAL CHIP	56K	5%	1/10W
R126	1-216-097-00	RES, CHIP	100K	5%	1/10W
R127	1-216-150-91	RES, CHIP	10	5%	1/8W
R128	1-216-150-91	RES, CHIP	10	5%	1/8W
R221	1-216-190-00	RES, CHIP	470	5%	1/8W
R223	1-216-045-00	METAL CHIP	680	5%	1/10W
R224	1-216-081-00	METAL CHIP	22K	5%	1/10W
R225	1-216-091-00	METAL CHIP	56K	5%	1/10W
R226	1-216-097-00	RES, CHIP	100K	5%	1/10W
R227	1-216-150-91	RES, CHIP	10	5%	1/8W
R228	1-216-150-91	RES, CHIP	10	5%	1/8W
R328	1-216-097-00	RES, CHIP	100K	5%	1/10W
R329	1-216-093-11	RES, CHIP	68K	5%	1/10W
R330	1-216-089-00	RES, CHIP	47K	5%	1/10W
R331	1-216-121-00	RES, CHIP	1M	5%	1/10W
R332	1-216-073-00	METAL CHIP	10K	5%	1/10W
R333	1-216-049-11	RES, CHIP	1K	5%	1/10W
R334	1-216-097-00	RES, CHIP	100K	5%	1/10W
R336	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R340	1-216-073-00	METAL CHIP	10K	5%	1/10W
R341	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R342	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R343	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
		< RELAY >			
RY101	1-515-921-11	RELAY (12V)			
		< TERMINAL BOARD >			
SJ301	1-694-598-11	TERMINAL BOARD 4P (SPEAKER)			
**********					
*	A-2007-435-A	AUDIO BOARD, COMPLETE			
		**********			
		(including MOTOR BOARD)			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	FILM	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20%	16V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	FILM	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-104-396-11	ELECT	10uF	20%	16V
C602	1-104-396-11	ELECT	10uF	20%	16V
C611	1-124-907-11	ELECT	10uF	20%	50V
C612	1-124-907-11	ELECT	10uF	20%	50V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
C651	1-161-494-00	CERAMIC	0.022uF		25V
		< CONNECTOR >			
CN601	1-695-382-31	PIN, CONNECTOR (PC BOARD) 21P			
CN602	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P			
* CN651	1-564-521-11	PLUG, CONNECTOR 6P			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC601	8-759-111-44	IC uPC4570C-1			
IC602	8-759-143-54	IC uPC1330HA			
IC611	8-759-111-44	IC uPC4570C-1			
		< COIL >			
L331	1-410-780-11	INDUCTOR	27mH		
L431	1-410-780-11	INDUCTOR	27mH		
		< TRANSISTOR >			
Q621	8-729-142-46	TRANSISTOR	2SC2001TP-LK		
Q622	8-729-142-46	TRANSISTOR	2SC2001TP-LK		
Q623	8-729-026-68	TRANSISTOR	2SD2525 (TP)		
Q651	8-729-900-65	TRANSISTOR	2SA1345-TP		
		< RESISTOR >			
R301	1-247-881-00	CARBON	120K	5%	1/4W
R302	1-249-409-11	CARBON	220	5%	1/4W
R303	1-249-433-11	CARBON	22K	5%	1/4W
R304	1-247-889-00	CARBON	270K	5%	1/4W
R305	1-247-858-11	CARBON	13K	5%	1/4W
R311	1-247-881-00	CARBON	120K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R314	1-247-882-11	CARBON	130K	5%	1/4W
R315	1-247-850-11	CARBON	6.2K	5%	1/4W
R331	1-249-430-11	CARBON	12K	5%	1/4W
R401	1-247-881-00	CARBON	120K	5%	1/4W
R402	1-249-409-11	CARBON	220	5%	1/4W
R403	1-249-433-11	CARBON	22K	5%	1/4W
R404	1-247-889-00	CARBON	270K	5%	1/4W
R405	1-247-858-11	CARBON	13K	5%	1/4W
R411	1-247-881-00	CARBON	120K	5%	1/4W
R412	1-247-807-31	CARBON	100	5%	1/4W
R414	1-247-882-11	CARBON	130K	5%	1/4W
R415	1-247-850-11	CARBON	6.2K	5%	1/4W
R431	1-249-430-11	CARBON	12K	5%	1/4W
R601	1-249-409-11	CARBON	220	5%	1/4W
R602	1-249-409-11	CARBON	220	5%	1/4W
R608	1-249-409-11	CARBON	220	5%	1/4W
R609	1-249-433-11	CARBON	22K	5%	1/4W
R611	1-249-409-11	CARBON	220	5%	1/4W
R612	1-249-409-11	CARBON	220	5%	1/4W
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
R651	1-247-856-00	CARBON	11K	5%	1/4W
R652	1-247-856-00	CARBON	11K	5%	1/4W
R653	1-249-441-11	CARBON	100K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV341	1-238-551-11	RES, ADJ, CARBON 220K			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
RV441	1-238-551-11	RES, ADJ, CARBON 220K			
RV651	1-238-599-11	RES, ADJ, CARBON 4.7K			
RV652	1-238-599-11	RES, ADJ, CARBON 4.7K			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
**********					
	A-4405-850-A	CD BOARD, COMPLETE			
		**********			
	1-785-953-11	CONNECTOR, FFC/FPC			
		< CAPACITOR >			
C701	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C702	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C703	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C704	1-104-760-11	CERAMIC CHIP	0.047uF	10%	50V
C705	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C706	1-124-589-11	ELECT	47uF	20%	16V
C707	1-163-063-91	CERAMIC CHIP	0.022uF	10%	50V
C708	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C709	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C710	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C711	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C712	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C713	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C714	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C715	1-124-234-00	ELECT	22uF	20%	16V
C716	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C717	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C718	1-135-181-21	TANTALUM CHIP	4.7uF	20%	6.3V
C719	1-124-589-11	ELECT	47uF	20%	16V
C720	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C721	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C722	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C723	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C724	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
C725	1-163-062-00	CERAMIC CHIP	0.018uF	10%	50V
C727	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C728	1-124-589-11	ELECT	47uF	20%	16V
C729	1-126-162-11	ELECT	3.3uF	20%	50V
C730	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V
C731	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C732	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C736	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C737	1-163-059-91	CERAMIC CHIP	0.01uF	10%	50V
C739	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C741	1-163-023-00	CERAMIC CHIP	0.015uF	5%	50V
C742	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C743	1-124-589-11	ELECT	47uF	20%	16V
C744	1-124-472-11	ELECT	470uF	20%	10V
C745	1-124-584-00	ELECT	100uF	20%	10V
C746	1-163-181-00	CERAMIC CHIP	100PF	5%	50V
C750	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C751	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C752	1-104-329-11	CERAMIC CHIP	0.1uF	10%	50V
C753	1-124-584-00	ELECT	100uF	20%	10V
C754	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V

Ref. No.	Part No.	Description			Remark
C755	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C757	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C758	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C760	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C761	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C763	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C764	1-163-227-11	CERAMIC CHIP	10PF	0.5PF	50V
C765	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C768	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C769	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V
C771	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C772	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C773	1-124-584-00	ELECT	100uF	20%	10V
C774	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C775	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C776	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C777	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C780	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C781	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C782	1-126-163-11	ELECT	4.7uF	20%	50V
C790	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C791	1-163-007-11	CERAMIC CHIP	680PF	10%	50V
C792	1-126-163-11	ELECT	4.7uF	20%	50V
C793	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C798	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C799	1-115-185-11	CERAMIC CHIP	0.033uF	10%	50V
		< CONNECTOR >			
* CNP702	1-569-913-11	SOCKET, CONNECTOR 19P			
		< FERRITE BEAD >			
FB701	1-469-144-21	FERRITE	0uH		
FB702	1-469-144-21	FERRITE	0uH		
FB704	1-469-144-21	FERRITE	0uH		
FB705	1-543-813-21	FERRITE	0uH		
		< IC >			
IC701	8-752-082-14	IC CXA1992BR			
IC702	8-759-473-42	IC BA6898FP-E2			
IC703	8-752-384-13	IC CXD2589Q			
		< SHORT >			
JR701	1-216-295-00	SHORT	0		
JR702	1-216-295-00	SHORT	0		
JR704	1-216-295-00	SHORT	0		
JR705	1-216-295-00	SHORT	0		
JR706	1-216-295-00	SHORT	0		
JR707	1-216-295-00	SHORT	0		
JR709	1-216-295-00	SHORT	0		
JR711	1-216-296-00	SHORT	0		
JR712	1-216-296-00	SHORT	0		
JR713	1-216-296-00	SHORT	0		
JR714	1-216-296-00	SHORT	0		
JR715	1-216-296-00	SHORT	0		
JR718	1-216-296-00	SHORT	0		
JR719	1-216-296-00	SHORT	0		
JR720	1-216-296-00	SHORT	0		

Ref. No.	Part No.	Description			Remark
JR722	1-216-296-00	SHORT	0		
JR723	1-216-296-00	SHORT	0		
JR724	1-216-296-00	SHORT	0		
JR725	1-216-296-00	SHORT	0		
JR726	1-216-296-00	SHORT	0		
JR727	1-216-296-00	SHORT	0		
JR728	1-216-296-00	SHORT	0		
JR729	1-216-296-00	SHORT	0		
JR730	1-216-296-00	SHORT	0		
JR731	1-216-296-00	SHORT	0		
JR732	1-216-296-00	SHORT	0		
JR733	1-216-296-00	SHORT	0		
JR734	1-216-296-00	SHORT	0		
JR735	1-216-296-00	SHORT	0		
JR736	1-216-296-00	SHORT	0		
JR737	1-216-296-00	SHORT	0		
JR738	1-216-296-00	SHORT	0		
JR739	1-216-296-00	SHORT	0		
JR740	1-216-296-00	SHORT	0		
JR741	1-216-296-00	SHORT	0		
JR742	1-216-296-00	SHORT	0		
JR743	1-216-296-00	SHORT	0		
		< COIL>			
L701	1-410-993-11	INDUCTOR	1uH		
		< TRANSISTOR >			
Q701	8-729-101-07	TRANSISTOR	2SB798-T1-DLDK		
		< RESISTOR >			
R701	1-216-095-00	METAL CHIP	82K	5%	1/10W
R702	1-216-242-00	RES, CHIP	68K	5%	1/8W
R703	1-216-242-00	RES, CHIP	68K	5%	1/8W
R704	1-216-242-00	RES, CHIP	68K	5%	1/8W
R705	1-216-242-00	RES, CHIP	68K	5%	1/8W
R706	1-216-095-00	METAL CHIP	82K	5%	1/10W
R707	1-216-105-00	RES, CHIP	220K	5%	1/10W
R708	1-216-295-00	SHORT	0		
R709	1-216-101-00	METAL CHIP	150K	5%	1/10W
R711	1-216-101-00	METAL CHIP	150K	5%	1/10W
R712	1-216-109-00	METAL CHIP	330K	5%	1/10W
R713	1-216-295-00	SHORT	0		
R714	1-216-073-00	METAL CHIP	10K	5%	1/10W
R715	1-216-073-00	METAL CHIP	10K	5%	1/10W
R716	1-216-070-00	METAL CHIP	7.5K	5%	1/10W
R717	1-216-097-00	RES, CHIP	100K	5%	1/10W
R718	1-216-117-00	METAL CHIP	680K	5%	1/10W
R719	1-216-150-91	RES, CHIP	10	5%	1/8W
R720	1-216-075-00	METAL CHIP	12K	5%	1/10W
R721	1-216-080-00	METAL CHIP	20K	5%	1/10W
R722	1-216-097-00	RES, CHIP	100K	5%	1/10W
R723	1-216-263-00	RES, CHIP	510K	5%	1/8W
R724	1-216-093-11	RES, CHIP	68K	5%	1/10W
R725	1-216-101-00	METAL CHIP	150K	5%	1/10W
R726	1-216-243-00	RES, CHIP	75K	5%	1/8W
R727	1-216-089-00	RES, CHIP	47K	5%	1/10W
R728	1-216-097-00	RES, CHIP	100K	5%	1/10W
R729	1-216-075-00	METAL CHIP	12K	5%	1/10W
R730	1-216-234-00	RES, CHIP	33K	5%	1/8W
R731	1-216-081-00	METAL CHIP	22K	5%	1/10W
R734	1-216-218-00	RES, CHIP	6.8K	5%	1/8W
R735	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R736	1-216-230-00	RES, CHIP	22K	5%	1/8W
R737	1-216-224-91	RES, CHIP	12K	5%	1/8W
R738	1-216-085-00	METAL CHIP	33K	5%	1/10W
R739	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R741	1-216-049-11	RES, CHIP	1K	5%	1/10W
R742	1-216-049-11	RES, CHIP	1K	5%	1/10W
R744	1-216-049-11	RES, CHIP	1K	5%	1/10W
R745	1-216-049-11	RES, CHIP	1K	5%	1/10W
R746	1-216-049-11	RES, CHIP	1K	5%	1/10W
R747	1-216-089-00	RES, CHIP	47K	5%	1/10W
R757	1-216-049-11	RES, CHIP	1K	5%	1/10W
R758	1-216-089-00	RES, CHIP	47K	5%	1/10W
R760	1-216-089-00	RES, CHIP	47K	5%	1/10W
R764	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R765	1-216-049-11	RES, CHIP	1K	5%	1/10W
R766	1-216-073-00	METAL CHIP	10K	5%	1/10W
R768	1-216-121-00	RES, CHIP	1M	5%	1/10W
R771	1-216-073-00	METAL CHIP	10K	5%	1/10W
R772	1-216-105-00	RES, CHIP	220K	5%	1/10W
R780	1-216-075-00	METAL CHIP	12K	5%	1/10W
R781	1-216-075-00	METAL CHIP	12K	5%	1/10W
R782	1-216-075-00	METAL CHIP	12K	5%	1/10W
R790	1-216-075-00	METAL CHIP	12K	5%	1/10W
R791	1-216-075-00	METAL CHIP	12K	5%	1/10W
R792	1-216-075-00	METAL CHIP	12K	5%	1/10W
R793	1-216-041-00	METAL CHIP	470	5%	1/10W
R794	1-216-025-00	RES, CHIP	100	5%	1/10W
R795	1-216-238-91	RES, CHIP	47K	5%	1/8W
R796	1-216-089-00	RES, CHIP	47K	5%	1/10W
		< SWITCH >			
S701	1-762-812-11	SWITCH, LEAF (LIMIT)			
		< VIBRATOR >			
X701	1-767-226-11	VIBRATOR, CRYSTAL (16.9344MHz)			
**********					
	A-4426-637-A	CONTROL BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C819	1-124-259-11	ELECT	4.7uF	20%	50V
C820	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
		< CONNECTOR >			
CN807	1-569-937-11	SOCKET, CONNECTOR 21P			
		< LED >			
D810	8-719-074-42	LED SLR325VR-T31 (CD SYNC)			
D811	8-719-074-42	LED SLR325VR-T31 (DSG)			
D812	8-719-074-40	LED SLR325DU-T31 (MD)			

CONTROL

Ref. No.	Part No.	Description	Remark
D813	8-719-074-40	LED SLR325DU-T31 (CD)	
D814	8-719-074-40	LED SLR325DU-T31 (TUNER)	
D817	8-719-074-40	LED SLR325DU-T31 (TAPE)	
D820	8-719-074-42	LED SLR325VR-T31 (STANDBY I/⏻)	
D821	8-719-074-40	LED SLR325DU-T31 (VIDEO)	
D822	8-719-074-42	LED SLR325VR-T31 (HI-SPEED DUBBING)	
D823	8-719-074-90	LED SELU6814C-TP5 (DISC TRAY ILLUMINATION)	
		< IC >	
IC804	8-742-132-00	HYB IC SBX1976-51 (REMOTE CONTROL RECEIVER)	
		< TRANSISTOR >	
Q807	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q808	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q809	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q810	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q811	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q812	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q813	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q814	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q815	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q816	8-729-900-53	TRANSISTOR DTC114EKA-T146	
		< RESISTOR >	
R800	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R801	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R802	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R803	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R804	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R805	1-216-047-00	RES, CHIP 820 5% 1/10W	
R806	1-216-045-00	METAL CHIP 680 5% 1/10W	
R807	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R808	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R809	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R810	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R811	1-216-079-00	METAL CHIP 18K 5% 1/10W	
R812	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R813	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R814	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R815	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R816	1-216-047-00	RES, CHIP 820 5% 1/10W	
R817	1-216-045-00	METAL CHIP 680 5% 1/10W	
R819	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R820	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R821	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R822	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R823	1-216-047-00	RES, CHIP 820 5% 1/10W	
R824	1-216-045-00	METAL CHIP 680 5% 1/10W	
R825	1-216-047-00	RES, CHIP 820 5% 1/10W	
R826	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R828	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R829	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R830	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R831	1-216-047-00	RES, CHIP 820 5% 1/10W	
R832	1-216-045-00	METAL CHIP 680 5% 1/10W	
R833	1-216-047-00	RES, CHIP 820 5% 1/10W	
R834	1-216-043-00	RES, CHIP 560 5% 1/10W	
R835	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R836	1-216-043-00	RES, CHIP 560 5% 1/10W	
R837	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R838	1-216-043-00	RES, CHIP 560 5% 1/10W	
R839	1-216-041-00	METAL CHIP 470 5% 1/10W	
R840	1-216-043-00	RES, CHIP 560 5% 1/10W	
R841	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R842	1-216-047-00	RES, CHIP 820 5% 1/10W	
R843	1-216-043-00	RES, CHIP 560 5% 1/10W	
R844	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
R845	1-216-043-00	RES, CHIP 560 5% 1/10W	
R846	1-216-045-00	METAL CHIP 680 5% 1/10W	
R847	1-216-047-00	RES, CHIP 820 5% 1/10W	
R848	1-216-051-00	METAL CHIP 1.2K 5% 1/10W	
R850	1-216-065-00	RES, CHIP 4.7K 5% 1/10W	
		< ROTARY ENCODER >	
RV801	1-473-392-11	ENCODER, ROTARY (VOLUME)	
		< SWITCH >	
S800	1-571-760-11	SWITCH, KEY BOARD (TUNING –)	
S801	1-571-760-11	SWITCH, KEY BOARD (TUNING +)	
S802	1-571-760-11	SWITCH, KEY BOARD (REC ●)	
S803	1-571-760-11	SWITCH, KEY BOARD (TAPE B ◀◀)	
S804	1-571-760-11	SWITCH, KEY BOARD (TAPE B ▶▶)	
S805	1-571-760-11	SWITCH, KEY BOARD (TAPE B ■)	
S806	1-571-760-11	SWITCH, KEY BOARD (TAPE B ◀▶)	
S807	1-571-760-11	SWITCH, KEY BOARD (TUNER BAND)	
S808	1-571-760-11	SWITCH, KEY BOARD (CD ■)	
S809	1-571-760-11	SWITCH, KEY BOARD (CD ▶II)	
S810	1-571-760-11	SWITCH, KEY BOARD (TUNING MODE)	
S811	1-571-760-11	SWITCH, KEY BOARD (REPEAT)	
S812	1-571-760-11	SWITCH, KEY BOARD (PLAY MODE)	
S813	1-571-760-11	SWITCH, KEY BOARD (CD I◀◀ ◀◀)	
S814	1-571-760-11	SWITCH, KEY BOARD (CD ▶▶I ▶▶)	
S815	1-571-760-11	SWITCH, KEY BOARD (EJECT ⏏)	
S817	1-571-760-11	SWITCH, KEY BOARD (DSG)	
S818	1-571-760-11	SWITCH, KEY BOARD (VIDEO)	
S819	1-571-760-11	SWITCH, KEY BOARD (MD)	
S820	1-571-760-11	SWITCH, KEY BOARD (TAPE)	
S821	1-571-760-11	SWITCH, KEY BOARD (CD)	
S822	1-571-760-11	SWITCH, KEY BOARD (TUNER)	
S823	1-571-760-11	SWITCH, KEY BOARD (STANDBY I/⏻)	
S824	1-571-760-11	SWITCH, KEY BOARD (II)	
S825	1-571-760-11	SWITCH, KEY BOARD (CD SYNC)	
S827	1-571-760-11	SWITCH, KEY BOARD (HI-SPEED DUBBING)	
S828	1-571-760-11	SWITCH, KEY BOARD (TAPE A ◀◀)	
S829	1-571-760-11	SWITCH, KEY BOARD (TAPE A ▶▶)	
S830	1-571-760-11	SWITCH, KEY BOARD (TAPE A ■)	
S831	1-571-760-11	SWITCH, KEY BOARD (TAPE A ◀▶)	
S832	1-771-290-11	SWITCH, SLIDE (BASS)	
S833	1-771-290-11	SWITCH, SLIDE (TREBLE)	

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Ref. No.	Part No.	Description	Remark
	1-675-153-11	HEADPHONE BOARD	
		**********	
		< JACK >	
J301	1-785-925-11	JACK (PHONES)	
**********			
	1-675-150-11	LCD BOARD	
		**********	
	4-217-319-01	PLATE, LCD LIGHT	
		< CONNECTOR >	
CN802	1-793-599-11	SOCKET, CONNECTOR 17P	
CN804	1-793-601-11	SOCKET, CONNECTOR 21P	
		< LED >	
D657	8-719-075-51	LED SELS6B14C-LF62 (LCD BACK LIGHT)	
D658	8-719-075-51	LED SELS6B14C-LF62 (LCD BACK LIGHT)	
D659	8-719-075-51	LED SELS6B14C-LF62 (LCD BACK LIGHT)	
D660	8-719-075-51	LED SELS6B14C-LF62 (LCD BACK LIGHT)	
		< SHORT >	
JR601	1-216-296-00	SHORT 0	
		< LIQUID CRYSTAL DISPLAY >	
LCD801	1-803-542-11	DISPLAY PANEL, LIQUID CRYSTAL	
**********			
*	1-650-669-11	LEAF SWITCH BOARD	
		**********	
		< CONNECTOR >	
* CN1001	1-695-372-31	PIN, CONNECTOR (PC BOARD) 11P	
		< PHOTO REFLECTOR >	
Q1001	8-749-010-90	PHOTO REFLECTOR NJL5165KA-H2	
Q1002	8-749-010-90	PHOTO REFLECTOR NJL5165KA-H2	
		< RESISTOR >	
R1001	1-247-818-11	CARBON 300 5% 1/4W	
R1002	1-247-820-11	CARBON 360 5% 1/4W	
R1003	1-249-414-11	CARBON 560 5% 1/4W	
R1004	1-247-834-11	CARBON 1.3K 5% 1/4W	
R1005	1-247-818-11	CARBON 300 5% 1/4W	
		< SWITCH >	
S1001	1-692-832-11	SWITCH, PUSH (1KEY) (DECK A PLAY)	
S1002	1-692-832-11	SWITCH, PUSH (1KEY) (DECK B PLAY)	
S1003	1-572-248-11	SWITCH, LEAF (DECK A HALF)	
S1004	1-571-281-21	SWITCH, LEAF (DECK A 120/70)	
S1005	1-571-281-21	SWITCH, LEAF (DECK A REC)	
S1006	1-572-248-11	SWITCH, LEAF (DECK B HALF)	
S1008	1-571-281-21	SWITCH, LEAF (DECK B 120/70)	
S1009	1-571-281-21	SWITCH, LEAF (DECK B REC)	
**********			

Ref. No.	Part No.	Description	Remark
*	1-640-523-11	LOADING BOARD	
		**********	
		< CONNECTOR >	
* CN900	1-568-943-11	PIN, CONNECTOR 5P	
		< SWITCH >	
S901	1-692-667-11	SWITCH, LEAF (DISC TRAY CLOSE DET)	
S902	1-692-667-11	SWITCH, LEAF (DISC TRAY OPEN DET)	
**********			
	A-4426-641-A	MAIN BOARD, COMPLETE (AEP, UK, AED)	
	A-4426-844-A	MAIN BOARD, COMPLETE (EA, SP)	
		**********	
	A-4411-460-A	TUNER PACK (AEP, UK, AED)	
	A-4426-617-A	TUNER PACK (EA, SP)	
	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S	
		< CAPACITOR >	
C101	1-126-963-11	ELECT 4.7uF 20% 50V	
C102	1-126-963-11	ELECT 4.7uF 20% 50V	
C103	1-126-963-11	ELECT 4.7uF 20% 50V	
C104	1-126-963-11	ELECT 4.7uF 20% 50V	
C105	1-126-963-11	ELECT 4.7uF 20% 50V	
C106	1-126-963-11	ELECT 4.7uF 20% 50V	
C107	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C109	1-126-963-11	ELECT 4.7uF 20% 50V	
C110	1-126-963-11	ELECT 4.7uF 20% 50V	
C111	1-163-023-00	CERAMIC CHIP 0.015uF 5% 50V	
C112	1-163-023-00	CERAMIC CHIP 0.015uF 5% 50V	
C113	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C114	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C115	1-163-014-00	CERAMIC CHIP 0.0027uF 10% 50V	
C116	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C117	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C118	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C129	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C130	1-104-664-11	ELECT 47uF 20% 16V	
C131	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C201	1-126-963-11	ELECT 4.7uF 20% 50V	
C202	1-126-963-11	ELECT 4.7uF 20% 50V	
C203	1-126-963-11	ELECT 4.7uF 20% 50V	
C204	1-126-963-11	ELECT 4.7uF 20% 50V	
C205	1-126-963-11	ELECT 4.7uF 20% 50V	
C206	1-126-963-11	ELECT 4.7uF 20% 50V	
C207	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C209	1-126-963-11	ELECT 4.7uF 20% 50V	
C210	1-126-963-11	ELECT 4.7uF 20% 50V	
C211	1-163-023-00	CERAMIC CHIP 0.015uF 5% 50V	
C212	1-163-023-00	CERAMIC CHIP 0.015uF 5% 50V	
C213	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C214	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C215	1-163-014-00	CERAMIC CHIP 0.0027uF 10% 50V	
C216	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C217	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C218	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C229	1-163-005-11	CERAMIC CHIP 470PF 10% 50V	
C230	1-104-664-11	ELECT 47uF 20% 16V	

MAIN

Ref. No.	Part No.	Description			Remark
C231	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C301	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C302	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C303	1-130-495-00	MYLAR	0.1uF	5%	50V
C304	1-124-907-11	ELECT	10uF	20%	50V
C305	1-124-903-11	ELECT	1uF	20%	50V
C306	1-104-665-11	ELECT	100uF	20%	16V
C307	1-124-907-11	ELECT	10uF	20%	50V
C308	1-124-907-11	ELECT	10uF	20%	50V
C309	1-124-903-11	ELECT	1uF	20%	50V
C310	1-124-443-00	ELECT	100uF	20%	10V
C312	1-126-942-61	ELECT	1000uF	20%	25V
C313	1-126-942-61	ELECT	1000uF	20%	25V
C314	1-104-666-11	ELECT	220uF	20%	16V
C315	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C316	1-104-666-11	ELECT	220uF	20%	16V
C317	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C318	1-104-666-11	ELECT	220uF	20%	16V
C319	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C320	1-104-665-11	ELECT	100uF	20%	16V
C321	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C323	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C324	1-104-665-11	ELECT	100uF	20%	16V
C325	1-104-665-11	ELECT	100uF	20%	16V
C326	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C327	1-104-665-11	ELECT	100uF	20%	16V
C328	1-104-665-11	ELECT	100uF	20%	16V
C329	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C330	1-104-665-11	ELECT	100uF	20%	16V
C331	1-104-665-11	ELECT	100uF	20%	16V
C332	1-124-480-11	ELECT	470uF	20%	25V
C333	1-124-907-11	ELECT	10uF	20%	50V
C334	1-124-119-00	ELECT	330uF	20%	16V
C335	1-104-666-11	ELECT	220uF	20%	16V
C336	1-124-903-11	ELECT	1uF	20%	50V
C337	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C339	1-124-907-11	ELECT	10uF	20%	50V
C341	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C346	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C347	1-104-664-11	ELECT	47uF	20%	16V
C348	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C351	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C352	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C353	1-130-495-00	MYLAR	0.1uF	5%	50V
C355	1-124-903-11	ELECT	1uF	20%	50V
C357	1-124-907-11	ELECT	10uF	20%	50V
C358	1-124-907-11	ELECT	10uF	20%	50V
C359	1-124-903-11	ELECT	1uF	20%	50V
C360	1-124-443-00	ELECT	100uF	20%	10V
C380	1-104-665-11	ELECT	100uF	20%	16V
C401	1-162-851-11	CERAMIC	0.1uF		16V
C402	1-162-851-11	CERAMIC	0.1uF		16V
C403	1-162-851-11	CERAMIC	0.1uF		16V
C404	1-124-478-11	ELECT	100uF	20%	25V
C405	1-124-480-11	ELECT	470uF	20%	25V
C800	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C801	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C802	1-104-664-11	ELECT	47uF	20%	16V
C803	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C804	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C805	1-104-664-11	ELECT	47uF	20%	16V
C806	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C807	1-163-237-11	CERAMIC CHIP	27PF	5%	50V
C808	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C809	1-163-102-00	CERAMIC CHIP	24PF	5%	50V
C810	1-128-647-11	DOUBLE LAYER	0.1F		
C811	1-163-102-00	CERAMIC CHIP	24PF	5%	50V
C812	1-104-664-11	ELECT	47uF	20%	16V (AEP, UK, AED)
C813	1-163-239-11	CERAMIC CHIP	33PF	5%	50V (AEP, UK, AED)
C814	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V (AEP, UK, AED)
C815	1-163-239-11	CERAMIC CHIP	33PF	5%	50V (AEP, UK, AED)
C816	1-126-963-11	ELECT	4.7uF	20%	50V (AEP, UK, AED)
C817	1-163-002-11	CERAMIC CHIP	270PF	10%	50V (AEP, UK, AED)
C818	1-163-135-00	CERAMIC CHIP	560PF	5%	50V (AEP, UK, AED)
C850	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (AEP, UK, AED)
C851	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V (AEP, UK, AED)
		< CONNECTOR >			
* CN301	1-569-935-11	SOCKET, CONNECTOR 19P			
* CN306	1-568-954-11	PIN, CONNECTOR 5P			
CN401	1-569-937-11	SOCKET, CONNECTOR 21P			
CN402	1-569-928-11	SOCKET, CONNECTOR 11P			
CN801	1-793-600-11	SOCKET, CONNECTOR 17P			
CN803	1-793-602-11	SOCKET, CONNECTOR 21P			
* CN805	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
CN806	1-569-937-11	SOCKET, CONNECTOR 21P			
* CN808	1-506-984-11	PIN, CONNECTOR (PC BOARD) 2P			
		< DIODE >			
D301	8-719-991-33	DIODE 1SS133T-77			
D304	8-719-991-33	DIODE 1SS133T-77			
D314	8-719-109-89	DIODE MTZJ-T-77-5.6B			
D315	8-719-991-33	DIODE 1SS133T-77			
D317	8-719-921-75	DIODE MTZN-T-77-10B			
D318	8-719-991-33	DIODE 1SS133T-77			
D319	8-719-921-63	DIODE MTZJ-T-77-7.5B			
D320	8-719-991-33	DIODE 1SS133T-77			
D321	8-719-991-33	DIODE 1SS133T-77			
D322	8-719-991-33	DIODE 1SS133T-77			
D323	8-719-929-15	DIODE MTZJ-T-77-9.1B			
D324	8-719-981-95	DIODE MTZJ-T-77-2.7B			
D325	8-719-991-33	DIODE 1SS133T-77			
D330	8-719-991-33	DIODE 1SS133T-77			
D331	8-719-991-33	DIODE 1SS133T-77			
D804	8-719-991-33	DIODE 1SS133T-77			
D805	8-719-982-11	DIODE MTZJ-T-77-4.3B (AEP, UK, AED)			
D806	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description	Remark
D807	8-719-991-33	DIODE 1SS133T-77	
D808	8-719-991-33	DIODE 1SS133T-77	
D809	8-719-991-33	DIODE 1SS133T-77	
D815	8-719-991-33	DIODE 1SS133T-77	
D816	8-719-991-33	DIODE 1SS133T-77	
		< IC >	
IC301	8-759-585-01	IC TDA7439	
IC302	8-759-909-71	IC BA4558F-E2	
IC304	8-759-584-41	IC K1A7808PI	
IC305	8-759-584-40	IC KA7908	
IC306	8-759-347-19	IC KIA7812PI	
IC308	8-749-921-12	IC GP1F32T (OPTICAL DIGITAL OUT (CD))	
IC309	8-759-584-65	IC KA3082	
IC310	8-759-324-40	IC KIA7805PI	
IC311	8-759-584-41	IC K1A7808PI	
IC401	8-759-363-21	IC HA12203	
IC402	8-759-584-65	IC KA3082	
IC800	8-759-153-90	IC uPD7225GB-3B7	
IC801	8-759-584-64	IC BMR0301H	
IC802	8-752-908-92	IC CXP84332-168Q	
IC803	8-759-557-36	IC BU1924F-E2 (AEP, UK, AED)	
		< SHORT>	
JR301	1-216-296-00	SHORT 0	
JR302	1-216-296-00	SHORT 0	
JR303	1-216-296-00	SHORT 0	
JR306	1-216-296-00	SHORT 0	
JR307	1-216-296-00	SHORT 0	
JR308	1-216-296-00	SHORT 0	
JR309	1-216-296-00	SHORT 0	
JR310	1-216-296-00	SHORT 0	
JR312	1-216-296-00	SHORT 0	
JR314	1-216-296-00	SHORT 0	
JR315	1-216-296-00	SHORT 0	
JR316	1-216-296-00	SHORT 0	
JR317	1-216-296-00	SHORT 0	
JR318	1-216-296-00	SHORT 0	
JR322	1-216-296-00	SHORT 0	
JR323	1-216-296-00	SHORT 0	
JR324	1-216-296-00	SHORT 0	
JR325	1-216-296-00	SHORT 0	
JR326	1-216-296-00	SHORT 0	
JR329	1-216-296-00	SHORT 0	
JR330	1-216-296-00	SHORT 0	
JR331	1-216-296-00	SHORT 0	
JR332	1-216-296-00	SHORT 0	
JR333	1-216-296-00	SHORT 0	
JR334	1-216-296-00	SHORT 0	
JR335	1-216-296-00	SHORT 0	
JR338	1-216-296-00	SHORT 0	
JR339	1-216-296-00	SHORT 0	
JR340	1-216-296-00	SHORT 0	
JR341	1-216-296-00	SHORT 0	
JR342	1-216-296-00	SHORT 0	
JR343	1-216-296-00	SHORT 0	
JR344	1-216-296-00	SHORT 0	
JR345	1-216-296-00	SHORT 0	

Ref. No.	Part No.	Description	Remark
JR351	1-216-295-00	SHORT 0	
JR354	1-216-295-00	SHORT 0	
JR355	1-216-295-00	SHORT 0	
		< JACK >	
PJ303	1-785-926-11	JACK, PIN 6P (LINE OUT, MD IN, VIDEO IN)	
		< TRANSISTOR >	
Q101	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q102	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q103	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q106	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q201	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q202	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q203	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q206	8-729-920-31	TRANSISTOR DTC343TK-T-146	
Q303	8-729-027-31	TRANSISTOR DTA124EKA-T146	
Q304	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q310	8-729-019-00	TRANSISTOR 2SD2394-G	
Q311	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q312	8-729-901-00	TRANSISTOR DTC124EKA-T146	
Q313	8-729-028-54	TRANSISTOR KTC3205-Y-AT	
Q314	8-729-028-54	TRANSISTOR KTC3205-Y-AT	
Q315	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q316	8-729-901-00	TRANSISTOR DTC124EKA-T146	
Q317	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q318	8-729-901-00	TRANSISTOR DTC124EKA-T146	
Q321	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q322	8-729-901-00	TRANSISTOR DTC124EKA-T146	
Q323	8-729-801-84	TRANSISTOR 2SB1013-TP-34	
Q324	8-729-901-00	TRANSISTOR DTC124EKA-T146	
Q403	8-729-801-84	TRANSISTOR 2SB1013-TP-34	
Q406	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q407	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q408	8-729-801-84	TRANSISTOR 2SB1013-TP-34	
Q409	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q800	8-729-801-84	TRANSISTOR 2SB1013-TP-34	
Q801	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q804	8-729-801-84	TRANSISTOR 2SB1013-TP-34	
Q805	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q806	8-729-900-53	TRANSISTOR DTC114EKA-T146	
Q830	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R	(AEP, UK, AED)
Q850	8-729-801-84	TRANSISTOR 2SB1013-TP-34	
Q851	8-729-900-53	TRANSISTOR DTC114EKA-T146	
		< RESISTOR >	
R103	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R105	1-216-055-00	METAL CHIP 1.8K 5% 1/10W	
R106	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R107	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
R108	1-216-072-00	METAL CHIP 9.1K 5% 1/10W	
R109	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R110	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R111	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R112	1-216-049-11	RES, CHIP 1K 5% 1/10W	
R113	1-216-089-00	RES, CHIP 47K 5% 1/10W	

MAIN

Ref. No.	Part No.	Description			Remark
R114	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R115	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R116	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R117	1-216-089-00	RES, CHIP	47K	5%	1/10W
R118	1-216-073-00	METAL CHIP	10K	5%	1/10W
R131	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R133	1-216-049-11	RES, CHIP	1K	5%	1/10W
R134	1-216-025-00	RES, CHIP	100	5%	1/10W
R135	1-216-089-00	RES, CHIP	47K	5%	1/10W
R136	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R137	1-216-049-11	RES, CHIP	1K	5%	1/10W
R138	1-216-073-00	METAL CHIP	10K	5%	1/10W
R203	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R205	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R206	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R207	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R208	1-216-072-00	METAL CHIP	9.1K	5%	1/10W
R209	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R210	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R211	1-216-049-11	RES, CHIP	1K	5%	1/10W
R212	1-216-049-11	RES, CHIP	1K	5%	1/10W
R213	1-216-089-00	RES, CHIP	47K	5%	1/10W
R214	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R215	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R216	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R217	1-216-089-00	RES, CHIP	47K	5%	1/10W
R218	1-216-073-00	METAL CHIP	10K	5%	1/10W
R231	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R233	1-216-049-11	RES, CHIP	1K	5%	1/10W
R234	1-216-025-00	RES, CHIP	100	5%	1/10W
R235	1-216-089-00	RES, CHIP	47K	5%	1/10W
R236	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R237	1-216-049-11	RES, CHIP	1K	5%	1/10W
R238	1-216-073-00	METAL CHIP	10K	5%	1/10W
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W
R302	1-216-035-00	METAL CHIP	270	5%	1/10W
R304	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R305	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R306	1-216-055-00	METAL CHIP	1.8K	5%	1/10W
R307	1-216-079-00	METAL CHIP	18K	5%	1/10W
R308	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R309	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R314	1-216-047-00	RES, CHIP	820	5%	1/10W
R316	1-216-033-00	METAL CHIP	220	5%	1/10W
R317	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R320	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R321	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R324	1-216-105-00	RES, CHIP	220K	5%	1/10W
R325	1-216-089-00	RES, CHIP	47K	5%	1/10W
R326	1-216-089-00	RES, CHIP	47K	5%	1/10W
R337	1-216-041-00	METAL CHIP	470	5%	1/10W
R338	1-216-001-00	METAL CHIP	10	5%	1/10W
R339	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R351	1-216-081-00	METAL CHIP	22K	5%	1/10W
R354	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R355	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R356	1-216-055-00	METAL CHIP	1.8K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R357	1-216-079-00	METAL CHIP	18K	5%	1/10W
R358	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R359	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R390	1-216-089-00	RES, CHIP	47K	5%	1/10W
R401	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R402	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R403	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R404	1-216-049-11	RES, CHIP	1K	5%	1/10W
R405	1-216-089-00	RES, CHIP	47K	5%	1/10W
R406	1-216-089-00	RES, CHIP	47K	5%	1/10W
R407	1-216-089-00	RES, CHIP	47K	5%	1/10W
R408	1-216-089-00	RES, CHIP	47K	5%	1/10W
R410	1-216-072-00	METAL CHIP	9.1K	5%	1/10W
R411	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R414	1-216-073-00	METAL CHIP	10K	5%	1/10W
R416	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R417	1-216-097-00	RES, CHIP	100K	5%	1/10W
R419	1-216-073-00	METAL CHIP	10K	5%	1/10W
R454	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R455	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R456	1-216-037-00	METAL CHIP	330	5%	1/10W
R457	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R458	1-216-073-00	METAL CHIP	10K	5%	1/10W
R461	1-216-089-00	RES, CHIP	47K	5%	1/10W
R462	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R500	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R501	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R502	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R503	1-216-097-00	RES, CHIP	100K	5%	1/10W
R504	1-216-097-00	RES, CHIP	100K	5%	1/10W
R505	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R506	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R507	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R508	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R509	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R510	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R511	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R512	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R513	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R514	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R515	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R516	1-216-097-00	RES, CHIP	100K	5%	1/10W
R517	1-216-109-00	METAL CHIP	330K	5%	1/10W
R518	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R519	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R520	1-216-097-00	RES, CHIP	100K	5%	1/10W
R521	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R522	1-216-049-11	RES, CHIP	1K	5%	1/10W
R523	1-216-049-11	RES, CHIP	1K	5%	1/10W
R524	1-216-049-11	RES, CHIP	1K	5%	1/10W
R525	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R526	1-216-049-11	RES, CHIP	1K	5%	1/10W
R527	1-216-049-11	RES, CHIP	1K	5%	1/10W
R528	1-216-049-11	RES, CHIP	1K	5%	1/10W
R529	1-216-049-11	RES, CHIP	1K	5%	1/10W
R530	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R531	1-216-049-11	RES, CHIP	1K	5%	1/10W
R532	1-216-049-11	RES, CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R533	1-216-049-11	RES, CHIP	1K	5%	1/10W
R534	1-216-049-11	RES, CHIP	1K	5%	1/10W
R535	1-216-049-11	RES, CHIP	1K	5%	1/10W
R537	1-216-049-11	RES, CHIP	1K	5%	1/10W
R538	1-216-049-11	RES, CHIP	1K	5%	1/10W
R539	1-216-049-11	RES, CHIP	1K	5%	1/10W
R540	1-216-049-11	RES, CHIP	1K	5%	1/10W
R541	1-216-049-11	RES, CHIP	1K	5%	1/10W
R542	1-216-049-11	RES, CHIP	1K	5%	1/10W
R543	1-216-101-00	METAL CHIP	150K	5%	1/10W
R544	1-216-049-11	RES, CHIP	1K	5%	1/10W
R545	1-216-049-11	RES, CHIP	1K	5%	1/10W
R546	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R548	1-216-049-11	RES, CHIP	1K	5%	1/10W
R549	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R550	1-216-049-11	RES, CHIP	1K	5%	1/10W
R551	1-216-049-11	RES, CHIP	1K	5%	1/10W
R552	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R553	1-216-073-00	METAL CHIP	10K	5%	1/10W
R554	1-216-073-00	METAL CHIP	10K	5%	1/10W
R555	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R556	1-216-049-11	RES, CHIP	1K	5%	1/10W
R557	1-216-073-00	METAL CHIP	10K	5%	1/10W
R558	1-216-049-11	RES, CHIP	1K	5%	1/10W
R559	1-216-049-11	RES, CHIP	1K	5%	1/10W
R560	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R561	1-216-049-11	RES, CHIP	1K	5%	1/10W
R562	1-216-049-11	RES, CHIP	1K	5%	1/10W
R563	1-216-049-11	RES, CHIP	1K	5%	1/10W
R564	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R565	1-216-049-11	RES, CHIP	1K	5%	1/10W
R566	1-216-089-00	RES, CHIP	47K	5%	1/10W
R567	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R568	1-216-049-11	RES, CHIP	1K	5%	1/10W
R569	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R570	1-216-049-11	RES, CHIP	1K	5%	1/10W
R571	1-216-013-00	METAL CHIP	33	5%	1/10W
R572	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R573	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R574	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R575	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R576	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R577	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R578	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R579	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R580	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R581	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R582	1-216-049-11	RES, CHIP	1K	5%	1/10W
R583	1-216-041-00	METAL CHIP	470	5%	1/10W
R584	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R585	1-216-041-00	METAL CHIP	470	5%	1/10W
R586	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R587	1-216-049-11	RES, CHIP	1K	5%	1/10W
R588	1-216-049-11	RES, CHIP	1K	5%	1/10W
R589	1-216-049-11	RES, CHIP	1K	5%	1/10W
R590	1-216-049-11	RES, CHIP	1K	5%	1/10W
R591	1-216-049-11	RES, CHIP	1K	5%	1/10W
R592	1-216-049-11	RES, CHIP	1K	5%	1/10W
R593	1-216-049-11	RES, CHIP	1K	5%	1/10W
R594	1-216-049-11	RES, CHIP	1K	5%	1/10W
R595	1-216-049-11	RES, CHIP	1K	5%	1/10W
R596	1-216-049-11	RES, CHIP	1K	5%	1/10W
R597	1-216-049-11	RES, CHIP	1K	5%	1/10W
R598	1-216-049-11	RES, CHIP	1K	5%	1/10W
R599	1-216-049-11	RES, CHIP	1K	5%	1/10W
R600	1-216-049-11	RES, CHIP	1K	5%	1/10W
R601	1-216-049-11	RES, CHIP	1K	5%	1/10W
R602	1-216-049-11	RES, CHIP	1K	5%	1/10W
R603	1-216-049-11	RES, CHIP	1K	5%	1/10W
R604	1-216-049-11	RES, CHIP	1K	5%	1/10W
R605	1-216-049-11	RES, CHIP	1K	5%	1/10W
R606	1-216-049-11	RES, CHIP	1K	5%	1/10W
R607	1-216-049-11	RES, CHIP	1K	5%	1/10W
R608	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R609	1-216-049-11	RES, CHIP	1K	5%	1/10W
R610	1-216-049-11	RES, CHIP	1K	5%	1/10W
R611	1-216-049-11	RES, CHIP	1K	5%	1/10W
R612	1-216-049-11	RES, CHIP	1K	5%	1/10W
R613	1-216-049-11	RES, CHIP	1K	5%	1/10W
R614	1-216-049-11	RES, CHIP	1K	5%	1/10W
R615	1-216-049-11	RES, CHIP	1K	5%	1/10W
R616	1-216-049-11	RES, CHIP	1K	5%	1/10W
R617	1-216-049-11	RES, CHIP	1K	5%	1/10W
R618	1-216-049-11	RES, CHIP	1K	5%	1/10W
R619	1-216-049-11	RES, CHIP	1K	5%	1/10W
R620	1-216-049-11	RES, CHIP	1K	5%	1/10W
R621	1-216-049-11	RES, CHIP	1K	5%	1/10W
R622	1-216-049-11	RES, CHIP	1K	5%	1/10W
R623	1-216-049-11	RES, CHIP	1K	5%	1/10W
R624	1-247-812-11	CARBON	160	5%	1/4W
R626	1-216-035-00	METAL CHIP	270	5%	1/10W (AEP, UK, AED)
R633	1-216-027-00	METAL CHIP	120	5%	1/10W
R636	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R637	1-216-041-00	METAL CHIP	470	5%	1/10W
R638	1-216-089-00	RES, CHIP	47K	5%	1/10W
R639	1-216-021-00	METAL CHIP	68	5%	1/10W
R640	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R641	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R647	1-216-021-00	METAL CHIP	68	5%	1/10W
R650	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R853	1-216-113-00	METAL CHIP	470K	5%	1/10W (AEP, UK, AED)
R854	1-216-043-00	RES, CHIP	560	5%	1/10W (AEP, UK, AED)
R855	1-216-065-00	RES, CHIP	4.7K	5%	1/10W (AEP, UK, AED)
R856	1-216-097-00	RES, CHIP	100K	5%	1/10W (AEP, UK, AED)
R860	1-216-065-00	RES, CHIP	4.7K	5%	1/10W
R861	1-216-089-00	RES, CHIP	47K	5%	1/10W
R888	1-216-089-00	RES, CHIP	47K	5%	1/10W
R889	1-216-065-00	RES, CHIP	4.7K	5%	1/10W

MAIN POWER

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
		< VARIABLE RESISTOR >			
RV301	1-225-213-21	RES, ADJ, CARBON 2.2K			
RV351	1-225-213-21	RES, ADJ, CARBON 2.2K			
		< VIBRATOR >			
X800	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X801	1-767-184-11	VIBRATOR, CERAMIC (4.19MHz)			
X803	1-579-242-41	VIBRATOR, CRYSTAL (4.332MHz)			(AEP, UK, AED)
**********					
	1-675-155-11	POWER BOARD			
		**********			
	1-533-313-11	HOLDER, FUSE			
		< CAPACITOR >			
⚠C901	1-113-925-11	CERAMIC	0.01uF	20% 250V	(AEP, UK, AED)
C903	1-101-005-00	CERAMIC	22000PF	50V	(AEP, UK, AED)
C904	1-101-005-00	CERAMIC	22000PF	50V	(AEP, UK, AED)
C905	1-101-005-00	CERAMIC	22000PF	50V	(AEP, UK, AED)
C906	1-101-005-00	CERAMIC	22000PF	50V	(AEP, UK, AED)
C907	1-101-005-00	CERAMIC	22000PF	50V	
C908	1-101-005-00	CERAMIC	22000PF	50V	
C909	1-101-005-00	CERAMIC	22000PF	50V	
C910	1-101-005-00	CERAMIC	22000PF	50V	
C911	1-161-494-00	CERAMIC	0.022uF	25V	
C912	1-161-494-00	CERAMIC	0.022uF	25V	
C913	1-161-494-00	CERAMIC	0.022uF	25V	
C914	1-161-494-00	CERAMIC	0.022uF	25V	
		< CONNECTOR >			
CN901	1-766-276-11	PIN, CONNECTOR (PC BOARD) 3P			
CN902	1-766-279-11	PIN, CONNECTOR (PC BOARD) 6P			
CNP901	1-564-321-00	PIN, CONNECTOR 2P			
		< DIODE >			
D902	8-719-200-82	DIODE 11ES2-TA1B (AEP, UK, AED)			
D903	8-719-200-82	DIODE 11ES2-TA1B (AEP, UK, AED)			
D904	8-719-200-82	DIODE 11ES2-TA1B (AEP, UK, AED)			
D905	8-719-200-82	DIODE 11ES2-TA1B (AEP, UK, AED)			
D906	8-719-200-82	DIODE 11ES2-TA1B (AEP, UK, AED)			
D907	8-719-902-17	DIODE 1N5401			
D908	8-719-902-17	DIODE 1N5401			
D909	8-719-902-17	DIODE 1N5401			
D910	8-719-902-17	DIODE 1N5401			
D911	8-719-046-07	DIODE 2A02M			
D912	8-719-046-07	DIODE 2A02M			
D913	8-719-046-07	DIODE 2A02M			
D914	8-719-046-07	DIODE 2A02M			
		< FUSE >			
⚠F901	1-533-464-11	FUSE, GLASS TUBE (DIA.5) (T0.8AL/250V)			
⚠F902	1-533-468-11	FUSE, GLASS TUBE (DIA.5) (T2AL/250V)			
⚠F903	1-533-468-11	FUSE, GLASS TUBE (DIA.5) (T2AL/250V)			
		< RELAY >			
⚠RY901	1-755-321-11	RELAY (AEP, UK, AED)			
		< SWITCH >			
⚠S901	1-552-921-00	SWITCH, POWER (VOLTAGE CHANGE) (VOLTAGE SELECTOR) (EA, SP)			
		< TRANSFORMER >			
⚠T901	1-435-100-11	TRANSFORMER, POWER (AEP, UK, AED)			
⚠T901	1-435-101-11	TRANSFORMER, POWER (EA, SP)			
⚠T902	1-433-811-11	TRANSFORMER, POWER (AEP, UK, AED)			
**********					
		MISCELLANEOUS			
		**********			
57	1-791-437-11	WIRE (FLAT TYPE) (17 CORE)			
58	1-791-438-11	WIRE (FLAT TYPE) (21 CORE) (180mm)			
62	1-418-482-11	ILLUMINATION BLOCK, LED			
66	1-791-435-11	WIRE (FLAT TYPE) (21 CORE) (105mm)			
108	1-791-436-11	WIRE (FLAT TYPE) (21 CORE)			
109	1-791-434-11	WIRE (FLAT TYPE) (11 CORE)			
⚠114	1-696-169-11	CORD, POWER			
⚠115	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)			
159	1-452-493-21	MAGNET			
204	1-773-126-11	WIRE (FLAT TYPE) (19 CORE)			
⚠206	8-820-070-02	OPTICAL PICK-UP KSM-213CCP/K1N			
209	1-773-113-11	WIRE, FLAT TYPE (16 CORE)			
HP101	1-500-093-11	HEAD, MAGNETIC (PLAY BACK) (DECK A)			
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE) (DECK B)			
M1	X-3371-223-1	MOTOR ASSY, CAPSTAN			
M2	A-2004-410-A	MOTOR ASSY, DC (TRIGGER)			
M701	X-2646-381-1	MOTOR CHASSIS ASSY (MB) (SPINDLE)			
M702	X-2625-769-1	MOTOR GEAR ASSY (MB) (RP) (SLED)			
M901	X-2625-117-1	MOTOR ASSY, LOADING			
⚠T901	1-435-100-11	TRANSFORMER, POWER (AEP, UK, AED)			
⚠T901	1-435-101-11	TRANSFORMER, POWER (EA, SP)			
**********					
		**********			
		HARDWARE LIST			
		**********			
#1	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S			
#2	7-685-245-14	SCREW +KTP 3X6 TYPE2 NON-SLIT			
#3	7-685-647-79	SCREW (+PTP DIA.12 WH 3)			
#4	7-685-659-14	SCREW +BVTP 4X8 TYPE2 N-S			
#5	7-685-135-19	SCREW +P 2.6X10 TYPE2 NON-SLIT			
#6	7-621-255-32	SCREW +P 2X5			
#7	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S			
#8	7-685-131-19	SCREW +BTP 2.6X4 TYPE2 N-S			
#9	7-685-862-09	SCREW +BVTT 2.6X6 (S)			
#10	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S			
#11	7-623-921-01	RING, RETAINING, CAPSTAN			
#12	7-621-775-00	SCREW +B 2.6X3			
#13	7-621-775-10	SCREW +B 2.6X4			

Sony Corporation
Home Audio Company

99H0553-1
Printed in Japan © 1999. 8
Published by Quality Assurance Dept.